

April, 1975

DMS-DR-2065
NASA CR-141,519

VOLUME II

WIND TUNNEL TESTS OF AN 0.019-SCALE SPACE SHUTTLE
INTEGRATED VEHICLE -2A CONFIGURATION (MODEL 14-OTS)
IN THE NASA AMES 8 X 7-FOOT UNITARY WIND TUNNEL
(1A12C)

By

R. B. Hardin and R. R. Burrows
Rockwell International Space Division

Prepared under NASA Contract Number NAS9-13247

By

Data Management Services
Chrysler Corporation Space Division
New Orleans, La. 70189

for

Engineering Analysis Division
Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS

Test Number: ARC 87-710
NASA Series Number: IA12C
Test Dates: 11 July to 27 July, 1973

FACILITY COORDINATOR:

S. L. Treon
Ames Research Center
Mail Stop 227-5
Moffett Field, California 94035

Phone: (415) 965-5850

PROJECT ENGINEERS:

R. B. Hardin
Rockwell International
Space Division
12214 Lakewood Blvd.
Mail Stop AC07
Downey, California 90241

Phone: (213) 922-2440

R. R. Burrows
Rockwell International
Space Division
12214 Lakewood Blvd.
Mail Stop AC07
Downey, California 90241

Phone: (213) 922-2440

DATA MANAGEMENT SERVICES:

Prepared by: Liaison--D. A. Sarver, T. L. Mulkey
Operations--B. J. Burst

Reviewed by: Operations--J. L. Glynn *JL*

Approved: *N. D. Kemp*
N. D. Kemp, Manager
Data Management Services

Concurrence: *J. G. Swider*
J. G. Swider, Manager
Flight Technology Branch

Chrysler Corporation Space Division assumes no responsibility for the data presented other than display characteristics.

WIND TUNNEL TESTS OF AN 0.019-SCALE SPACE SHUTTLE
INTEGRATED VEHICLE -2A CONFIGURATION (MODEL 14-OTS) IN THE
NASA AMES 8 X 7-FOOT UNITARY WIND TUNNEL (IA12C)

By

R. B. Hardin and R. R. Burrows
Rockwell International Space Division

ABSTRACT

This report contains information concerning a wind tunnel test of the 0.019-scale Space Shuttle Integrated Vehicle in the Ames 8 x 7-foot Unitary Wind Tunnel. The test started 11 July 1973 for a total of 133 runs and 165 charge hours. The test identification number is IA12C.

The purpose of the test was to determine the effects of cold jet gas plumes on (1) the integrated vehicle longitudinal and lateral-directional force data, (2) exposed wing hinge moment, (3) wing pressure distributions, (4) orbiter MPS external pressure distributions, and (5) model base pressures. An investigation was undertaken to determine the similarity between solid and gaseous plumes; fluorescent oil flow visualization studies were also conducted.

This report is published in three volumes. Volume I contains plotted force data and tabulated listings of the force and nozzle pressure data. Volume II contains plotted wing pressure data while Volume III contains the corresponding tabulated data listing.

TABLE OF CONTENTS

	Page
ABSTRACT	iii
INDEX OF MODEL FIGURES	2
INDEX OF DATA FIGURES	4
NOMENCLATURE	8
CONFIGURATIONS INVESTIGATED	19
TEST FACILITY DESCRIPTION	28
DATA REDUCTION	29
TABLES	
I. TEST CONDITIONS	39
II. COLLATION INFORMATION	
a. Data Set/Run Number Summary - Force and Wing Pressure Data	40
b. Nozzle Pressure Collation	47
c. Data Set/Run Number Summary - Nozzle Pressure Data	50
III. MODEL COMPONENT DIMENSIONAL DATA	51
FIGURES	
MODEL	71
DATA	100
Force Data (See Volume I)	
Wing Pressure Data	
APPENDICES	
TABULATED SOURCE DATA	
Force Data (See Volume I)	
Nozzle Pressure Data (See Volume I)	
Wing Pressure Data (See Volume III)	

INDEX OF MODEL FIGURES

Figure		Page
1.	AXIS SYSTEMS	
a.	General	71
b.	Angles of attack and incidence defined	72
c.	Elevon and rudder deflection angles defined	73
d.	Wing hinge moment data reduction dimensions defined	74
e.	Gimbal planes and sign conventions	75
f.	Nozzle gimbal angle	76
2.	MODEL SKETCHES	
a.	Ascent vehicle configuration	77
b.	2A orbiter configurations, O_1 and O_2	78
c.	Basic 2A fuselage with body flap, B_{10}	79
d.	Orbiter base and cavity pressure tap locations	80
e.	Body flap, F_4	81
f.	OMS pod configuration, M_3	82
g.	OMS pod base static pressure tap locations	83
h.	Basic nozzle dimensions	84
i.	Nozzles N_9 and N_{10}	85
j.	Orbiter nozzle, N_{10} , pressure orifice locations	86
k.	Nozzle N_{18} , internal contour	87
l.	Nozzle, N_{17} , internal contour	88
m.	Solid rocket motor configurations	89
n.	SRM pressure tap locations	90

Figure		Page
o.	External tank, T_{10}	91
p.	EOHT pressure tap locations	92
q.	Vertical tail, V_5	93
r.	Basic 2A wing configuration, W_{87}	94
s.	Wing pressure tap locations for right hand wing panel	95
3.	MODEL INSTALLATION PHOTOGRAPHS	
a.	Front view of launch vehicle with high pressure plumbing	96
b.	Aft view of launch vehicle	97
c.	Front view of second stage (SRB's off)	98
d.	Aft view of second stage (SRB's off)	99

INDEX OF DATA FIGURES

TITLE	COEFFICIENT SCHEDULE	CONDITIONS VARYING	PLOT PAGES
<u>FORCE DATA (VOLUME I)</u>			
Plume Size Effects on Longitudinal Characteristics	A	OPR, SRMPR, POWER	1-15
Plume Size Effects on Lateral Characteristics	B	OPR, SRMPR, POWER	16-27
Plume and Rudder Deflection Effects on Longitudinal Characteristics	A	OPR, SRMPR, POWER	28-42
Plume and Rudder Deflection Effects on Lateral Characteristics	B	OPR, SRMPR POWER	43-54
Orbiter Engine Out and Rudder Deflection Effects On Longitudinal Characteristics	A	OPR, SRMPR, POWER	55-69
Orbiter Engine Out Effects on Longitudinal Characteristics	A	OPR, SRMPR, POWER	70-84
Plume and SRB Shroud Effects on Longitudinal Characteristics	A	OPR, SRMPR, POWER	85-99
Plume and Nozzle Gimbal Angle Effects on Longitudinal Characteristics	A	GIMBAL, POWER	100-114
Plume and Nozzle Gimbal Angle Effects on Lateral Characteristics	B	GIMBAL, POWER	115-126
Power-Off Gimbal Angle Effects on Longitudinal Characteristics	A	GIMBAL	127-141

INDEX OF DATA FIGURES (Continued)

TITLE	COEFFICIENT SCHEDULE	CONDITIONS VARYING	PLOT PAGES
Power-Off Gimbal Angle Effects on Lateral Characteristics	B	GIMBAL	142-153
SRB Plume Mismatch Effects on Longitudinal Characteristics	A	POWER, CONFIG.	154-163
SRB Plume Mismatch Effects on Lateral Characteristics	B	POWER, CONFIG.	164-171
Plume and SRB Position Effects on Longitudinal Characteristics	A	POWER, CONFIG.	172-181
Plume and SRB Position Effects on Lateral Characteristics	B	POWER, CONFIG.	182-189
Second Stage Orbiter Engine Out Effects On Longitudinal Characteristics	A	POWER, CONFIG.	190-194
Second Stage Orbiter Engine Out Effects On Lateral Characteristics	B	OPR, POWER	195-198
Effect of Plume Simulation Method on Longitudinal Characteristics	A	OPR, SRMPR, POWER	199-208
Effect of Plume Simulation Method On Lateral Characteristics	B	OPR, SRMPR POWER	209-216
WING PRESSURE DATA (VOLUME II)			
Plume Size Effect On Wing Pressure Distribution			
- Wing Top	C	OPR, SRMPR, POWER	1-36
- Wing Bottom	C	OPR, SRMPR, POWER	37-72

INDEX OF DATA FIGURES (Continued)

TITLE	COEFFICIENT SCHEDULE	CONDITIONS VARYING	PLOT PAGES
Orbiter Engine Out Effects On Wing Pressure Distribution			
- Wing Top	C	OPR, SRMPR, POWER	73-126
- Wing Bottom	C	OPR, SRMPR, POWER	127-180
Plume and SRB Shroud Effects On Wing Pressure Distribution			
- Wing Top	C	OPR, SRMPR, POWER	181-234
- Wing Bottom	C	OPR, SRMPR, POWER	235-288
Plume and Nozzle Gimbal Angle Effects on Wing Pressure			
- Wing Top	C	POWER, GIMBAL	289-342
- Wing Bottom	C	POWER, GIMBAL	343-396
Power-Off Nozzle Gimbal Angle Effects On Wing Pressure Distribution			
- Wing Top	C	GIMBAL	397-450
- Wing Bottom	C	GIMBAL	451-504
SRB Plume Mismatch Effects On Wing Pressure Distribution			
- Wing Top	C	OPR, SRMPR, POWER, CONFIG.	505-540
- Wing Bottom	C	OPR, SRMPR, POWER, CONFIG.	541-576

INDEX OF DATA FIGURES (Concluded)

TITLE	COEFFICIENT SCHEDULE	CONDITIONS VARYING	PLOT PAGES
Plume and SRB Position Effect on Wing Pressure Distribution			
- Wing Top	C	OPR, SRMPR, POWER, CONFIG.	577-612
- Wing Bottom	C	OPR, SRMPR, POWER, CONFIG.	613-648
Second Stage Orbiter Engine-Out Effects on Wing Pressure Distribution			
- Wing Top	C	POWER, OPR, CONFIG.	649-666
- Wing Bottom	C	POWER, OPR, CONFIG.	667-684
Effect of Plume Simulation Method on Wing Pressure Distribution			
- Wing Top	C	OPR, SRMPR, POWER	685-720
- Wing Bottom	C	OPR, SRMPR, POWER	721-756

COEFFICIENT SCHEDULES:

(A): CAP, CAB, CN, CLM vs. α (B): CY, CBL, CYN vs. β (C): CP vs. X/C
 CN vs. CLM CY vs. CYN

Note: Nozzle pressure data do not appear in plotted form. See Appendix B (Volume I)
 for listing of these data.

NOMENCLATURE General

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
a		speed of sound; m/sec, ft/sec
C _p	CP	pressure coefficient; $(p_1 - p_\infty)/q$
M	MACH	Mach number; V/a
P		pressure; N/m ² , psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2\rho V^2$, N/m ² , psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
ϕ	PHI	angle of roll, degrees
ρ		mass density; kg/m ³ , slugs/ft ³

Reference & C.G. Definitions

A _b		base area; m ² , ft ²
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
\bar{L}_{REF} \bar{c}	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m ² , ft ²
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS

b	base
l	local
s	static conditions
t	total conditions
∞	free stream

NOMENCLATURE (Continued)

Body-Axis System

<u>SYMBOL</u>	<u>SADGAC SYMBOL</u>	<u>DEFINITION</u>
C_N	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
C_A	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_{A_b}	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(P_b - P_\infty)/qS$
C_{A_f}	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS \ell_{REF}}$
C_n	CYN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
C_l	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$

Stability-Axis System

C_L	CL	lift coefficient; $\frac{\text{lift}}{qS}$
C_D	CD	drag coefficient; $\frac{\text{drag}}{qS}$
C_{D_b}	CDB	base-drag coefficient; $\frac{\text{base drag}}{qS}$
C_{D_f}	CDF	forebody drag coefficient; $C_D - C_{D_b}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS \ell_{REF}}$
C_n	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
C_l	CCL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$
L/D	L/D	lift-to-drag ratio; C_L/C_D
L/D_f	L/DF	lift to forebody drag ratio; C_L/C_{D_f}

NOMENCLATURE (Continued)

ADDITIONS TO STANDARD NOMENCLATURE

<u>Symbol</u>	<u>Description</u>
Ab_{ACPS}	Attitude control propulsion system base area, ft^2 (total for two)
Ab_{EOHT}	External tank total base area (cavity plus model base), ft^2
Ab_{OMS}	Base area of orbital maneuvering system (minus projected area of OMS nozzle), ft^2 (total for two)
Ab_{OMSN}	Nozzle exit area of OMS, ft^2 (total for two)
Ab_{ORB}	Total orbiter base area (minus projected exit area of MPS nozzles), ft^2
Ab_{SRM}	SRM shroud base area (minus projected nozzle exit area), (total for two), ft^2
Ac_{EOHT}	External tank cavity area, ft^2
Ac_{ORB}	Orbiter cavity area, ft^2
Ac_{SRM}	SRM cavity area, ft^2 (total for two)
An_{ORB}	Total exit area of (3) orbiter MPS nozzles, ft^2
An_{SRM}	Total exit area of (2) SRM nozzles, ft^2
a	Distance from N_1 gage to MRP (positive forward of MRP), inches
b_w	orbiter exposed wing panel semi-span (distance from exposed root chord to tip chord.), inches
\bar{c}_e	Elevon M.A.C. length, inches
\bar{c}_r	Rudder M.A.C. length, inches
CA_{BAL}	Balance chord force coefficient (uncorrected).
CA_{bACPS}	Attitude control maneuvering system base chord force coefficient
CA_{bEOHT}	External tank base chord force coefficient (based on Ab_{EOHT})
CA_{bEOHT}^*	External tank base chord force coefficient (based on Ac_{EOHT})
CA_{bOMS}	Orbital maneuvering system base chord force coefficient.

NOMENCLATURE (Continued)

<u>Plot Symbol</u>	<u>Symbol</u>	<u>Description</u>
	C_{AbOMSN}	Orbital maneuvering system nozzle base chord force coefficient
	C_{AbORB}	Orbiter base chord force coefficient (based on A_{bORB})
	C_{AbORB}^*	Orbiter base chord force coefficient (based on A_{CORB})
	C_{AbSRM}	SRM base chord force coefficient (based on A_{bSRM})
	C_{AbSRM}^*	SRM base chord force coefficient (based on A_{CSRM})
	C_{ACEOHT}	External tank cavity chord force coefficient (corrected to base pressure)
	C_{ACEOHT}^*	External tank cavity chord force coefficient (based on A_{CEOHT} and EOHT cavity pressures)
	C_{ACORB}	Orbiter cavity chord force coefficient (corrected to base pressure)
	C_{ACORB}^*	Orbiter cavity chord force coefficient (based on A_{CORB} and orbiter cavity pressures)
	C_{ACSRM}	SRM cavity chord force coefficient (corrected to base pressure)
	C_{ACSRM}^*	SRM cavity chord force coefficient (based on A_{CSRM} and SRM cavity pressures)
	C_{ANORB}	Orbiter nozzle chord force coefficient
	C_{ANSRM}	SRM nozzle chord force coefficient
	C_{Af}	Ascent vehicle forebody chord force coefficient
	C_{AT}	Ascent vehicle total chord force coefficient
	C_{B_l}	Ascent vehicle rolling moment coefficient
	C_{BW}	Wing bending moment coefficient about exposed root chord
CHEO, CHEI	$C_{H_a}()$	Elevon hinge moment coefficient (Subscript denotes inboard or outboard)

NOMENCLATURE (Continued)

<u>Plot Symbol</u>	<u>Symbol</u>	<u>Description</u>
CHW	C_{H_r}	Rudder hinge moment coefficient
CBW	C_{H_w}	Wing torsional moment coefficient
	C_{m_f}	Ascent vehicle forebody pitching coefficient
	C_{m_t}	Ascent vehicle total pitching moment coefficient
	$C_{m_{BAL}}$	Balance pitching moment coefficient
	C_N	Ascent vehicle normal force coefficient
CNW	C_{N_w}	Normal force coefficient on one exposed wing panel
	$C_p()$	Wing, base, cavity, and upper MPS nozzle pressure coefficient
	C_y	Ascent vehicle side force coefficient
	C_{Y_n}	Ascent vehicle yawing moment coefficient
	\bar{C}_w	Mean aerodynamic chord of exposed wing panel (based on S_w), inches
	d	Distance from N_2 gage to MRP (positive forward of MRP) inches
	e	Distance from MRP to balance centerline (positive above MRP)
	f	Distance from MRP to Y_1 gage (positive forward of MRP)
	$G_p()$	Gimbal pitch angle of nozzle from null position (denoted by subscript), degrees
	$G_y()$	Gimbal yaw angle of nozzle from null position (denoted by subscript), degrees
	g	Distance from MRP to Y_2 gage (positive forward of MRP), inches
	i	Incidence angle of orbiter reference plane with respect to EOHT reference plane, degrees
	$K_e()$	Elevon hinge moment gage calibration factor (subscript denotes inboard or outboard) in.-lb/cts
	$K_{r_{pe}}$	Ratio of Measured to Theoretical Exit Pressure $P_{e, meas}/P_{e, true}$

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Description</u>
K_r	Rudder hinge moment gage calibration factor, in.-lbs/cts
K_{ij}	Wing gage calibration factor, in.-lb/ct where i = gage number and j = order of K in the second degree calibration curve fit
l_{REF}	Longitudinal reference length, inches
$m_{1,2,3}$	Wing strain gage output (uncorrected for interactions) in.-lbs; where 1 is the inboard bending gage, 2 is the outboard bending gage, and 3 is the torsion gage.
$M_{1,2,3}$	Wing strain gage output which has been corrected for interactions, in.-lbs; where 1 is the inboard bending gage, 2 is the outboard bending gage, and 3 is the torsion gage.
M_o	Tunnel freestream mach number.
$m'_{1,2,3}$	Wing strain gage output, raw data counts, where 1 is the inboard bending gage, 2 is the outboard bending gage, and 3 is the torsion gage.
$m'_e()$	Elevon hinge moment gage output, raw data counts where subscript denotes inboard or outboard panel.
m'_r	Rudder hinge moment gage output, raw data counts.
$MRP_{(X,Y,Z)}$	Moment reference point in X,Y,Z coordinates, inches
N_1	Forward normal force gage output, pounds
N_2	Aft normal force gage output, pounds
N_w	Normal force on exposed wing panel, pounds.
$P_c()$	Nozzle plenum total pressure denoted by a subscript

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Description</u>
$P_e()$	Nozzle exit static pressure (denoted by a subscript), psia
$P()$	Model pressure, psfa
P_o	Tunnel static pressure, psfa
P_T	Tunnel total pressure, psfa
q	Tunnel freestream dynamic pressure, psf
$RPC()$	Ratio of plenum total pressure to P_T , denoted by a subscript
$RP_e()$	Ratio of nozzle exit static pressure to P_T , denoted by a subscript
RN	Tunnel reynolds number, per foot
S_e	Elevon area (total one side) ft^2
S_r	Rudder area, ft^2
S_w	Area of one exposed wing panel (includes glove area), ft^2
S_{REF}	Reference area, ft^2
T_o	Tunnel freestream static temperature, °R
T_T	Tunnel total temperature, °R
W_{F1}	Model pressure weighting factor, either 0 or 1
X_w	Distance between wing bending gage m_1 and m_2 , inches

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Description</u>
XCP	Model station for center of pressure (X_T), inches
XCP _W	Model station of exposed wing panel center of pressure location (X_T), inches
X _O	Orbiter longitudinal station, inches
X _{HL}	Orbiter station of exposed wing torsional axis, inches
X _T	EOHT longitudinal station, inches
Y _W	Spanwise distance from the exposed wing root chord to the m ₂ gage (positive when m ₂ gage is outboard of reference station), model scale inches
Y _O	Orbiter spanwise station, inches
Y _{ROOT}	Orbiter spanwise station of exposed wing root chord, inches
Y _T	EOHT spanwise station, inches
YCP _W	Orbiter spanwise station of exposed wing panel center of pressure location, inches
Z _{bACPS}	Vertical distance from centroid of ACPS base area to MRP (positive above MRP), inches
Z _{bEOHT}	Vertical distance from centroid of EOHT base area to MRP (positive above MRP), inches
Z _{bOMS}	Vertical distance from centroid of OMS base area to MRP (positive above MRP), inches
Z _{bOMSN}	Vertical distance from centroid of OMS nozzle base area to MRP (positive above MRP), inches
Z _{bORB}	Vertical distance from centroid of ORB base area to MRP (positive above MRP), inches
Z _{bSRM}	Vertical distance from centroid of SRM base area to MRP (positive above MRP), inches

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Description</u>
z_{cEOHT}	Vertical distance from centroid of EOHT cavity area to MRP (positive above MRP), inches
z_{cORB}	Vertical distance from centroid of orbiter cavity area to MRP (positive above MRP), inches
z_{cSRM}	Vertical distance from centroid of SRM cavity area to MRP (positive above MRP), inches
z_{NORB}	Vertical distance from centroid of orbiter nozzle exit area to MRP (positive above MRP), inches
z_{NSRM}	Vertical distance from centroid of SRM nozzle exit area to MRP (positive above MRP), inches
δ_r	Rudder deflection, degrees
$\left(\frac{\partial m_1}{\partial m_2}\right)_{()} \cdots \left(\frac{\partial m_3}{\partial m_1}\right)_{()}$	First order interaction for wing bending and torsion gages. (1) denotes first order term in a 2nd degree curve fit, (2) denotes second order term in a 2nd degree curve fit
α, β	Ascent vehicle angle of attack and side slip respectively, degrees

NOMENCLATURE (Continued)

<u>Subscripts</u>	<u>Description</u>
a	aileron
ACPS	attitude control propulsion system
e	elevon
EOHT	external oxygen hydrogen tank
I	inboard
L	Left
O	outboard
OMS	orbital maneuvering system
OMSN	orbital maneuvering system nozzle
ORB	Orbiter
r	Rudder
R	Right
SRM	Solid Rocket Motor
T	Total
W	wing
1	Top MPS nozzle
2	Left MPS nozzle
3	Right MPS nozzle
4	Left SRM nozzle
5	Right SRM nozzle

NOMENCLATURE (Concluded)

<u>Symbol</u>	<u>Description</u>
OPR	Ratio of orbiter chamber pressure (P_c) to freestream total pressure
SRMPR	Ratio of SRM nozzle exit pressure (P_e) to freestream total pressure
MPSRA	Orbiter MPS nozzle rotation angle (same as θ_n), deg.
POWER	ON: indicates gaseous plumes are being generated OFF: indicates gaseous plumes are not being generated
X/D	Ratio of the distance forward of the nozzle exit to the internal diameter of the nozzle exit
RUDDER	Rudder deflection, deg.
ϕ	Radial angle on MPS nozzles with $\phi = 0^\circ$ on top, $\phi = 90^\circ$ on the right side, $\phi = 180^\circ$ on bottom, and $\phi = 270^\circ$ on left side, looking forward, deg.
θ_n	Rotation angle of MPS nozzles in ball sockets (clockwise rotation as looking forward is positive), deg.
GIMBAL	GIMBAL = 1.0 (GP1 = GY1 = 0° , GY2 = -3.5° , GY3 = $+3.5^\circ$) GIMBAL = 2.0 (GP1 = $+11^\circ$, GY1 = GY2 = GY3 = -9°) GIMBAL = 3.0 (GP1 = GP2 = GP3 = $+11^\circ$, GY2 = -3.5° , GY3 = $+3.5^\circ$, GP4 = GP5 = $+7.0^\circ$) GIMBAL = 4.0 (GP1 = -11° , GP2 = GP3 = -8° , GY2 = -3.5° , GY3 = $+3.5^\circ$, GP4 = GP5 = -7°)

CONFIGURATIONS INVESTIGATED

The model tested was an 0.019-scale representation of the NASA/Rockwell configuration of the integrated space shuttle vehicle. The model had the capability of cold jet simulation of the jet plumes generated from the SRM and MPS nozzles.

The -2A configuration orbiter was rigidly attached to the EOHT at 0° incidence with respect to the EOHT centerline. The orbiter MPS nozzles were attached to the non-metric air supply system. Each nozzle could be gimballed $\pm 11^\circ$ pitch and $\pm 9^\circ$ yaw.

The orbiter righthand wing panel was instrumented with 40 static pressure taps and the lefthand wing was instrumented with a single flexure three-component moment balance. The elevon panels of the lefthand wing panel were each instrumented with a single-component moment balance.

The vertical tail rudder had the capability of being deflected $\pm 10^\circ$. The rudder panel was instrumented with a single-component moment balance.

The -4 configuration EOHT was mounted on a 2.5-inch sting mounted internal balance.

Both -2A and -4 configuration SRM's were available for testing. Each SRM was rigidly attached to the EOHT with the SRM centerline on water plane $X_T = 0.0$ in. and butt plane $Y_T = 243$ in. full scale. In addition to the baseline position the SRM's could be shifted forward 71 in. full scale. The SRM nozzles were attached to the non-metric air supply system and could be gimballed $\pm 7^\circ$ in pitch and $\pm 7^\circ$ in yaw.

Solid plumes were fabricated for the three orbiter nozzles and the two SRM nozzles with the contours simulating the Mach 3.5 gaseous plume shape.

The orbiter had three MPS nozzles whose individual gimbal points each define the origin of three separate reference systems. These reference systems are shown in figure 1 (e). Positive indications of gimbal pitch and gimbal yaw are shown.

Figure 1 (f) is an enlarged view of one of these reference systems. All three planes shown are at right angles to one another. The dashed lines are projections of the nozzle centerline onto the pitch and yaw planes of the reference system. (α) is the angle of pitch, either up or down; (ψ) is the angle of yaw, either right or left.

Each nozzle is physically set to a gimbal angle of pitch and/or yaw by an apparatus which measures (ϕ), some radial direction in the base plane and (γ), the angle from that radial to the nozzle centerline. The ϕ sector is determined by (α) and (ψ):

ϕ	α	ψ
270° to 360°	0° to +90°	0° to +90°
180° to 270°	0° to -90°	0° to +90°
90° to 180°	0° to -90°	0° to -90°
0° to 90°	0° to +90°	0° to -90°

All test programs for this model use the symbol G_p , to denote the angle that the centerline of the nozzle is pitched (up or down), and

G_Y , as the angle that the centerline of the nozzle is yawed (right or left). Up and left are both in the positive direction when looking forward.

Since all angles are defined from the nozzle null position, the relationships are as follows:

$$(1) \quad G_P = \alpha - \alpha_{\text{null}}$$

$$(2) \quad G_Y = \psi - \psi_{\text{null}}$$

where α_{null} is the angle that the nozzle centerline is pitched from the reference system axis to null position, and ψ_{null} is the angle that the nozzle centerline is yawed from the reference system axis to null position (figure 1[f]).

The α_{null} and ψ_{null} are specified for each MPS nozzle in the dimensional data for N_9 and N_{10} . It should be noted here, that a side view of the orbiter shows that the nozzle base plate is rotated 13° from vertical (figure 1[e]). Therefore, the three independent nozzle reference systems for nozzle pitch differ from the orbiter's X_0, Y_0, Z_0 reference system by a 13° rotation angle from vertical.

The following equations were used to convert nozzle gimbal angles, α and ψ , to ϕ and γ , the two angles that the fixture uses to duplicate the given angles:

$$(1) \quad \tan \phi = \frac{-\tan \psi}{\tan \alpha}$$

$$(2) \quad \tan \gamma = \frac{\sin \phi + \cos \phi}{\tan \alpha - \tan \psi}$$

Also, $\theta = 90^\circ - \gamma$ for the following fixture settings:

TOP NOZZLE:

AERO SETTING	FIXTURE SETTING	
	ϕ	θ
Null & Firing $G_Y = G_P = 0$	0°	$+3^\circ$
$G_P = +11$	0°	$+14^\circ$
$G_P = -11$	180°	8°
$G_Y = +9$	288°	9.5°
$G_Y = -9$	71.7°	9.5°
$G_P = +11, G_Y = -9$	32.5°	16.5°

BOTTOM LEFT NOZZLE:

Firing (R3.5) $G_Y = -4.5$	180°	3°
$G_P = +11$	336.5°	8.7°
$G_P = -11$	193.6°	14.4°
$G_Y = +9$	256.7°	12.8°
$G_Y = -9^\circ$	118.3°	6.2°
$G_P = +11, G_Y = -9$	34.42°	9.7°
Null $G_P = 0 = G_Y$	229.4°	4.6°

BOTTOM RIGHT NOZZLE:

AERO SETTING	FIXTURE SETTING	
Firing (L3.5) $G_Y = +3.5$	180°	3°
$G_P = +11$	23.5°	8.7°
$G_P = -11$	166.2°	14.4°
$G_Y = +9$	241.8°	6.2°
$G_Y = -9$	103.3°	12.8°
$G_P = +11, G_Y = -9$	57.7°	14.7°
Null $G_P = 0 = G_Y$	130.6°	4.6°

The Ames high pressure air supply was utilized for cold jet plumes emanating from the orbiter MPS and SRM nozzles. The orbiter MPS and SRM nozzles had independent controls for separate throttling of each system of nozzles. SRM gaseous plumes could be produced without generating orbiter plumes but vice versa was not true. Plume shapes for various Mach numbers were produced by setting specific values of P_e/P_T for the orbiter nozzles and P_e/P_T for the SRM nozzles. Listed below are the pressure ratios used for nominal and off-nominal conditions.

NOZZLE	M_w	P_c/P_w	P_c/P_T	P_e/P_T	CONDITION
SRM	2.5	1490	87.21	.9158	nominal
	2.5	700	41.08	.4294	.471 nominal
	3.0	2686	73.13	.7679	nominal
	3.0	2686	73.13	.7679	nominal
	3.0	1440	39.20	.4116	.536 nominal
	3.0	4030	110.0	1.15	1.5 nominal
	3.5	6000	78.66	.8260	nominal *
	3.5	3312	43.42	.456	.552 nominal
	3.5	8400	110.0	1.15	1.4 nominal
ORBITER	2.5	534	31.255	.3720	nominal
	2.5	251	14.721	.1752	.471 nominal
	3.0	987	26.86	.3198	nominal
	3.0	530	14.40	.1714	.536 nominal
	3.0	1480	41.0	.480	1.5 nominal
	3.5	1820	23.86	.2840	nominal *
	3.5	1005	13.17	.1568	.552 nominal
	3.5	3090	41.0	.494	1.7 nominal

* Solid plumes available for this condition

The EOHT was mounted on the Ames 2.5-inch Task MK-III six-component internal balance. The model angle of attack was indicated by an Ames dangleometer and angle of sideslip was indicated by sector read-out plus sting/balance deflections.

The lefthand wing panel was instrumented with a three-component single flexure moment balance. The elevons of the lefthand wing panel and the rudder were each instrumented with a single flexure single-component moment balance.

The righthand orbiter wing panel was instrumented with forty (40) static pressure taps. A total of sixteen (16) base and cavity taps were installed for use in correcting chord force measurements.

The orbiter MCS nozzles each had twelve (12) external static taps at various radial and longitudinal locations. The nozzles were rotated to obtain a complete pressure survey around each nozzle.

The following configuration components were tested:

<u>Component</u>	<u>Definition</u>
B_{10}	Body
C_5	Canopy
D_7	Manipulator housing
F_h	Body flap
M_3	Orbital maneuvering subsystem (OMS) pod
N_8	OMS nozzles
N_9	Orbiter nozzles
N_{10}	Orbiter pressure nozzles
N_{17}	SRM nozzles $M_\infty = 0.9, 1.2$
N_{18}	SRM nozzles $M_\infty = 3.0, 3.5$
N_{29}	SRM nozzles (mismatch)
N_{30}	SRM nozzles forward
V_5	Vertical tail
R_1	Fuselage
W_{87}	Wing
E_{18}	Elevon
X_{10}	Transition strip
S_6	SRM (-2A)
S_{10}	SRM (-4)
S_{11}	SRM (-4 moved forward)
T_{10}	BOHT

The following table summarizes integrated vehicle (OTS) configurations investigated:

<u>Configuration</u>	<u>Description</u>
O ₁	Baseline 2A orbiter B ₁₀ C ₅ D ₇ F ₄ M ₃ N ₈ N ₉ V ₅ R ₅ W ₈₇ E ₁₈ X ₁₀
O ₂	Baseline 2A orbiter with static taps on the three MPS nozzles B ₁₀ C ₅ D ₇ F ₄ M ₃ N ₈ N ₁₀ V ₅ R ₅ W ₈₇ E ₁₈ X ₁₀
O ₃	Same as O ₁ with top MPS nozzle blocked
O ₄	Same as O ₁ with lower lefthand MPS nozzle blocked
T ₁	Baseline configuration 4 EOHT T ₁₀
S ₁	Baseline configuration 4 SRM S ₁₀ N ₁₈
S ₂	Same as S ₁ shifted forward 71 in. full scale S ₁₁ N ₃₀
S ₃	Same as S ₁ but with mismatched SRM nozzles S ₁₀ N ₂₉
S ₄	Baseline 2A SRM S ₆ N ₁₈

These symbols are used as a shorthand notation to designate groups of components on the Data Set/Run Number Summary (Table IIa.).

TEST FACILITY DESCRIPTION

The Ames Research Center Unitary Plan Wind Tunnel 8- by 7-foot supersonic test circuit is a closed-return, variable-density, air-medium facility with a 16-foot-long test section. The throat has flexible sidewalls for control of tunnel Mach number. The 8- by 7-foot tunnel uses the same motors and compressors as the 9- by 7-foot circuit.

The tunnel is capable of attaining Mach numbers from 2.45 to 3.50 at Reynolds numbers from below $1.0 \times 10^6/\text{ft}$ to approximately $5.0 \times 10^6/\text{ft}$.

Models are supported, in general, from stings mounted to a body-of-revolution on a floor-to-ceiling strut system. Internal strain-gauge balances are used for force and moment data, and pressure instrumentation is provided.

Schlieren and shadowgraph equipment is available, as well as additional force, moment, and stress monitoring instrumentation for specific models.

DATA REDUCTION

The lefthand wing panel was instrumented with a single-flexure three component moment balance. This balance was temperature compensated and gave accurate measurements at all tunnel temperatures.

The two elevons on the lefthand wing panel and the rudder were each instrumented with single component moment balances. These balances were not temperature compensated and experienced large zero shifts during the test. During any specific pitch or yaw run the zero shifts were negligible. However, during a series of pitch and yaw runs the zero shifts happened at a point that cannot be determined. The sensitivity did not change. The tabulated data for these components (CH_{E_I} , CH_{E_O} , CH_R) are presented and should be used only for obtaining slopes of these measurements vs. α or β and should not be used for defining magnitude of the moment load.

Center of pressure (XCP):

$$XCP = MRP (X_T) - \frac{aN_1 + dN_2}{N_1 + N_2}$$

XCP \approx EOHT station, inches (model scale)

Ascent vehicle total chord force coefficient (C_{A_T}):

$$C_{A_T} = C_{A_{BAL}} + C_{A_{C_{ORB}}} + C_{A_{C_{EOHT}}} + C_{A_{C_{SRM}}} + C_{A_{N_{ORB}}} + C_{A_{N_{SRM}}}$$

where:

$$\begin{aligned} C_{A_{C_{ORB}}} &= -C_{A_{C_{ORB}}}^* + C_{A_{D_{ORB}}}^* \\ C_{A_{C_{EOHT}}} &= -C_{A_{C_{EOHT}}}^* + C_{A_{D_{EOHT}}}^* \\ C_{A_{C_{SRM}}} &= -C_{A_{C_{SRM}}}^* + C_{A_{D_{SRM}}}^* \end{aligned}$$

and:

$$C_{ACORB}^* = - \frac{\sum_{i=1}^{102} \frac{C_{P_i}}{WF_i}}{\sum_{i=1}^{102} \frac{C_{P_i}}{WF_i}} \left(\frac{A_{CORB}}{S_{REF}} \right)$$

$$C_{AbORB}^* = - \frac{\sum_{i=1}^{204} \frac{C_{P_i}}{WF_i}}{\sum_{i=1}^{204} \frac{C_{P_i}}{WF_i}} \left(\frac{A_{CORB}}{S_{REF}} \right)$$

$$C_{ANORB} = + \frac{\sum_{i=1}^{204} \frac{C_{P_i}}{WF_i}}{\sum_{i=1}^{204} \frac{C_{P_i}}{WF_i}} \left(\frac{A_{NORB}}{S_{REF}} \right)$$

$$C_{ACEOHT}^* = - \frac{\sum_{i=1}^{304} \frac{C_{P_i}}{WF_i}}{\sum_{i=1}^{304} \frac{C_{P_i}}{WF_i}} \left(\frac{A_{CEOHT}}{S_{REF}} \right)$$

$$C_{AbEOHT}^* = - \frac{\sum_{i=1}^{302} \frac{C_{P_i}}{WF_i}}{\sum_{i=1}^{302} \frac{C_{P_i}}{WF_i}} \left(\frac{A_{CEOHT}}{S_{REF}} \right)$$

$$C_{ACSRM}^* = - \frac{\sum_{i=1}^{104} \frac{C_{P_i}}{WF_i}}{\sum_{i=1}^{104} \frac{C_{P_i}}{WF_i}} \left(\frac{A_{CSRM}}{S_{REF}} \right)$$

$$C_{AbSRM}^* = - \frac{\sum_{i=1}^{404} \frac{C_{P_i}}{WF_i}}{\sum_{i=1}^{404} \frac{C_{P_i}}{WF_i}} \left(\frac{A_{CSRM}}{S_{REF}} \right)$$

$$C_{ANSRM} = + \frac{\sum_{i=1}^{404} \frac{C_{P_i}}{WF_i}}{\sum_{i=1}^{404} \frac{C_{P_i}}{WF_i}} \left(\frac{A_{NSRM}}{S_{REF}} \right)$$

Ascent vehicle total pitching moment coefficient (C_{M_T}):

$$C_{M_T} = C_{M_{BAL}} - C_{ACORB}^* \left[\frac{Z_{CORB}}{l_{REF}} \right] + C_{AbORB}^* \left[\frac{Z_{CORB}}{l_{REF}} \right] \\ + C_{ANORB} \left[\frac{Z_{NORB}}{l_{REF}} \right] - C_{ACEOHT}^* \left[\frac{Z_{CEOHT}}{l_{REF}} \right] + C_{AbEOHT}^* \left[\frac{Z_{CEOHT}}{l_{REF}} \right] \\ - C_{ACSRM}^* \left[\frac{Z_{CSRM}}{l_{REF}} \right] + C_{AbSRM}^* \left[\frac{Z_{CSRM}}{l_{REF}} \right] + C_{ANSRM} \left[\frac{Z_{NSRM}}{l_{REF}} \right]$$

Substituting:

$$C_{M_T} = C_{M_{BAL}} + C_{ACORB} \left[\frac{Z_{CORB}}{l_{REF}} \right] + C_{ANORB} \left[\frac{Z_{NORB}}{l_{REF}} \right] + C_{ACEOHT} \left[\frac{Z_{CEOHT}}{l_{REF}} \right] \\ + C_{ACSRM} \left[\frac{Z_{CSRM}}{l_{REF}} \right] + C_{ANSRM} \left[\frac{Z_{NSRM}}{l_{REF}} \right]$$

Forebody chord force coefficient (C_{A_f}):

$$C_{A_f} = C_{A_T} - C_{AbORB} - C_{AbEOHT} - C_{AbSRM} \\ - C_{AbOMS} - C_{AbOMSN} - C_{AbACPS}$$

where:

$$C_{AbORB} = - \frac{\sum_{i=1}^{204} CP_1}{\sum_{i=1}^{204} WF_1} \left[\frac{A_{bORB}}{S_{REF}} \right]$$

$$C_{AbEOHT} = - \frac{\sum_{i=1}^{302} CP_1}{\sum_{i=1}^{302} WF_1} \left[\frac{A_{bEOHT}}{S_{REF}} \right]$$

$$C_{AbSRM} = - \frac{\sum_{i=1}^{404} CP_1}{\sum_{i=1}^{404} WF_1} \left[\frac{A_{bSRM}}{S_{REF}} \right]$$

$$C_{AbOMSN} = -(CP_{305}) \left[\frac{A_{bOMSN}}{S_{REF}} \right]$$

$$C_{AbOMS} = - (C_{P105}) \left[\frac{A_{bOMS}}{S_{REF}} \right]$$

$$C_{AbACPS} = - (C_{P405}) \left[\frac{A_{bACPS}}{S_{REF}} \right]$$

Ascent vehicle forebody pitching moment (C_{M_f}):

$$\begin{aligned} C_{M_f} = C_{M_T} - C_{AbORB} \left[\frac{Z_{bORB}}{l_{REF}} \right] - C_{AbEOHT} \left[\frac{Z_{bEOHT}}{l_{REF}} \right] \\ - C_{AbSRM} \left[\frac{Z_{bSRM}}{l_{REF}} \right] - C_{AbOMS} \left[\frac{Z_{bOMS}}{l_{REF}} \right] \\ - C_{AbOMSN} \left[\frac{Z_{bOMSN}}{l_{REF}} \right] - C_{AbACPS} \left[\frac{Z_{bACPS}}{l_{REF}} \right] \end{aligned}$$

Wing, base, cavity, and upper MPS nozzle pressure coefficient (C_{P_i}):

$$C_{P_i} = \left(\frac{P_i - P_o}{q} \right)$$

Elevon hinge moment (C_{H_e}):

$$C_{He_I} = \frac{m'_{e_I} K_{e_I}}{q S_e C_e} \text{ (Inboard)}$$

$$C_{He_O} = \frac{m'_{e_O} K_{e_O}}{q S_e C_e} \text{ (outboard)}$$

$$C_{He_T} = C_{He_I} + C_{He_O}$$

where:

m' = raw cts

K = calibration factor (in.-lb/cts)

Rudder hinge moment (C_{H_R}):

$$C_{H_R} = \frac{m'_R K_R}{q S_R C_R}$$

Wing bending, torsion, and load CP:

Convert raw data counts to in.-lbs: (basic slopes)

where:

m' = raw data cts

K_{ij} = calibration factor (in.-lb/ct) and i = gage number
 j = order of term of second degree curve fit

$$m_1 = m'_1 K_{11} + (m'_1)^2 K_{12} \quad (\text{inboard gage})$$

$$m_2 = m'_2 K_{21} + (m'_2)^2 K_{22} \quad (\text{outboard gage})$$

$$m_3 = m'_3 K_{31} + (m'_3)^2 K_{32} \quad (\text{torsion gage})$$

Taking interactions into account:

$$M_1 = m_1 - \left[\left(\frac{\delta m_1}{\delta m_2} \right)_1 m_2 + \left(\frac{\delta m_1}{\delta m_2} \right)_2 (m_2)^2 \right] - \left[\left(\frac{\delta m_1}{\delta m_3} \right)_1 m_3 + \left(\frac{\delta m_1}{\delta m_3} \right)_2 (m_3)^2 \right]$$

$$M_2 = m_2 - \left[\left(\frac{\delta m_2}{\delta m_1} \right)_1 m_1 + \left(\frac{\delta m_2}{\delta m_1} \right)_2 (m_1)^2 \right] - \left[\left(\frac{\delta m_2}{\delta m_3} \right)_1 m_3 + \left(\frac{\delta m_2}{\delta m_3} \right)_2 (m_3)^2 \right]$$

$$M_3 = m_3 - \left[\left(\frac{\delta m_3}{\delta m_1} \right)_1 m_1 + \left(\frac{\delta m_3}{\delta m_1} \right)_2 (m_1)^2 \right] - \left[\left(\frac{\delta m_3}{\delta m_2} \right)_1 m_2 + \left(\frac{\delta m_3}{\delta m_2} \right)_2 (m_2)^2 \right]$$

Determine loads and coefficients:

$$N_W = \left(\frac{M_1 - M_2}{x_W} \right)$$

$$C_{N_W} = \frac{N_W}{q S_W}$$

$$C_{B_W} = \frac{(M_2 + Y_W N_W)}{q S_W b_W}$$

Determine loads and coefficients:

$$C_{HW} = \frac{M_3}{q S_W \bar{C}_W}$$

$$X_{CPW} = X_{HL} - \frac{C_{HW}}{C_{NW}} \bar{C}_W$$

$$Y_{CPW} = Y_{ROOT} + \frac{C_{BW}}{C_{NW}} b_W$$

Jet Plume Parameters ($RPC()$, $RPe()$):

$$RPC() = 144 \frac{P_C()}{P_T}$$

$$RPe() = 144 \frac{P_e()}{P_T} \left[\frac{1}{K_{rps}} \right]$$

The following reference dimensions and constants were used:

	<u>Full Scale</u>	<u>Model Scale</u>
$A_{b_{ACPS}}$	28.42 ft ²	0.01026 ft ²
$A_{b_{ET}}$	572.56 ft ²	0.2067 ft ²
$A_{b_{OMS}}$	16.973 ft ²	0.00613 ft ²
$A_{b_{OMSN}}$	25.631 ft ²	0.00925 ft ²
$A_{c_{ORB}}$	226.75 ft ²	0.08186 ft ²
$A_{b_{SRM}} (S_6)$	512.465 ft ²	0.185 ft ²
$A_{b_{SRM}} (S_{10})$	183.01 ft ²	0.0661 ft ²
$A_{c_{ET}}$	366.5 ft ²	0.132 ft ²
$A_{c_{ORB}}$	302.40 ft ²	0.1092 ft ²
$A_{c_{SRM}}$	181.378 ft ²	0.0654 ft ²
$A_{N_{ORB}}$	141.44 ft ²	0.0511 ft ²
$A_{N_{SRM}}$	219.02 ft ²	0.0791 ft ²
a	-	-2.783 in.
b_w	363.341 in.	6.903 in.
C_e	90.7 in.	1.723 in.
C_r	74.4 in.	1.414 in.

	<u>Full Scale</u>	<u>Model Scale</u>
C_w	513.474 in.	9.756 in.
d	-	-11.283 in.
e	-	0.0 in.
f	-	-3.533 in.
g	-	-10.533 in.
l_{REF}	1328.0 in.	25.232 in.
S_e	210.0 ft ² per wing panel	0.0758 ft ²
S_r	106.38 ft ²	0.0384 ft ²
S_w	1006.5 ft ²	0.363 ft ²
S_{REF}	2690.0 ft ²	0.971 ft ²
x_w	-	0.5638 in.
x_{HL}	1150.79 in.	21.865 in.
y_w	-	0.1423 in.
Y_{ROOT}	105.0 in.	1.995 in.
$z_{b_{ACPS}}$	402.987 in.	7.656 in.
$z_{b_{ET}}$	0.0	0.0
$z_{b_{OMS}}$	415.505 in.	7.895 in.
$z_{b_{OMSN}}$	437.94 in.	8.321 in.

	<u>Full Scale</u>	<u>Model Scale</u>
$Z_{b_{ORB}}$	310.0 in.	5.89 in.
$Z_{b_{SRM}}$	0.0	0.0
$Z_{c_{ET}}$	0.0	0.0
$Z_{c_{ORB}}$	349.66 in.	6.64 in.
$Z_{c_{SRM}}$	0.0	0.0
$Z_{N_{ORB}}$	335.0 in.	6.36 in.
$Z_{N_{SRM}}$	0.0	0.0

Calibration Constants

$K_{r_{pe}}$	(ORB) = 1.060	(SRM) = 1.122
--------------	---------------	---------------

	<u>Positive Gage Output</u>	<u>Negative Gage Output</u>
K_{e_I}	26.20 in. -lb-v/mv	26.39 in. -lb-v/mv
K_{e_o}	27.03 in. -lb-v/mv	27.42 in. -lb-v/mv
K_r	20.80 in. -lb-v/mv	20.885 in. -lb-v/mv
K_{11}	463.1672 in. -lb-v/mv	476.3954 in. -lb-v/mv
K_{12}	0.0	0.0
K_{21}	436.8877 in. -lb-v/mv	437.4474 in. -lb-v/mv
K_{22}	0.0	0.0

	<u>Positive Gage Output</u>	<u>Negative Gage Output</u>
K_{31}	539.9926 in. -lb-v/mv	538.9718 in. -lb-v/mv
K_{32}	0.0	0.0
$(\partial m_1 / \partial m_2)_1$	0.0	0.0
$(\partial m_1 / \partial m_2)_2$	0.0	0.0
$(\partial m_1 / \partial m_3)_1$	-.010562	-.004132
$(\partial m_1 / \partial m_3)_2$	0.0	0.0
$(\partial m_2 / \partial m_1)_1$	0.0	0.0
$(\partial m_2 / \partial m_1)_2$	0.0	0.0
$(\partial m_2 / \partial m_3)_1$.014458	.018206
$(\partial m_2 / \partial m_3)_2$	0.0	0.0
$(\partial m_3 / \partial m_1)_1$.022277	.029935
$(\partial m_3 / \partial m_1)_2$	0.0	0.0
$(\partial m_3 / \partial m_2)_1$	-.031554	-.03498
$(\partial m_3 / \partial m_2)_2$	0.0	0.0

TEST : IA12C (ARC 87-710)

DATE : July, 1973

TEST CONDITIONS

[illegible]

BALANCE UTILIZED: 2.5-inch Task MK III

		CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
fwd	NF	<u>1400 lbs</u>	<u>± .5%</u>	<u> </u>
fwd	SF	<u>700 lbs</u>	<u>± .5%</u>	<u> </u>
	AF	<u>280 lbs</u>	<u>± .5%</u>	<u> </u>
aft	NF	<u>1400 lbs</u>	<u>± .5%</u>	<u> </u>
aft	SF	<u>700 lbs</u>	<u>± .5%</u>	<u> </u>
	RM	<u>2000 in-lbs</u>	<u>± .5%</u>	<u> </u>

COMMENTS: Model was also instrumented with: elevon and rudder hinge moment gages, wing 3-component balance, nozzle and wing pressure orifices, and base pressures.

TABLE II. - COLLATION INFORMATION

a. TEST AKC 87-110 DATA SET/RUN NUMBER

COLLATION SUMMARY

☐ PRETEST
☒ POSTTEST

For use with U.S. 1

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		MACH NUMBERS		NO. of RUNS	PARAMETERS/VALUES						TEST RUN NUMBERS											
		A	B	1	2		MEDIA POWER	OPR	OPR PRG	GP1	GY1	GY2	GY3	4	5	6	7	8	9	10	11	12	13	14
REF002	<u>Q2 T1 S1</u>	A	0	25	2		0	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4		A	0		4		0	ON	0.4	9.158														
5		0	B		5		0	ON	0.4	9.158														
6		0	B		6		0	OFF	—	—														
7		A	0		7		30	OFF	—	—														
8		A	0		8		30	ON	31.26	9.158														
9		0	B		9		30	OFF	—	—														
10		0	B		10		30	ON	31.26	9.158														
11		A	0		11		60	ON	31.26	9.158														
12		0	B		12		60	ON	31.26	9.158														
13		A	0		13		60	OFF	—	—														
14		0	B		14		60	OFF	—	—														
15		A	0		15		10	ON	31.26	9.158														
16		0	B		16		90	ON	31.26	9.158														
17		0	B		17		90	OFF	—	—														
18		A	0		18		90	OFF	—	—														
19		A	0		19		120	ON	31.26	9.158														
20		0	B		20		120	ON	31.26	9.158														
21		0	B		21		120	OFF	—	—														
22		A	0		22		120	OFF	—	—														

COEFFICIENTS:
A: -8.6-4-2.0.2.4.6.8
B: -7.6-4-2.0.2.4.6.8
SCHEDULES

ORIGINAL PAGE IS
OF POOR QUALITY

TABLE II. - Continued

a. TEST ARC 87-712 DATA SET/RUN NUMBER (Continued)

COLLATION SUMMARY

☐ PRETEST
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		MACH NUMBERS			NO. of RUNS	PARAMETERS/VALUES					TEST RUN NUMBERS											
		A	B	25	30			MACH	PR	SM	GP1	GY1	GY2	GY3										
32023	Q2 T.S.	A	O	23					ON	31.26	11°	-9°	-9°	0°										
24		O	B	24					ON	31.26	11°													
25		O	B	25					OFF	-	-													
26		A	O	26					OFF	-	-													
27		A	O	27					ON	31.26	9.158													
28		O	B	28					ON	31.26	9.158													
29		O	B	29					OFF	-	-													
30		A	O	30					OFF	-	-													
31	Q1 T.S.	A	O	31					OFF	-	-	0°	0°	-3.5°	+3.5°									
32	WITH UPPER NGP	O	B	32					OFF	-	-													
33	NOZZLE INSTRUMENTED	O	B	33					ON	31.26	9.158													
34		A	O	34					ON	31.26	9.158													
35		A	O	35					ON	14.72	4.274													
36		O	B	36					ON	14.72	4.274													
37		A	O	37					OFF	-	-													
38		A	O	38					OFF	-	-													
39		O	B	39					OFF	-	-													
40		O	B	40					ON	26.86	7.677													
41		A	O	41					ON	26.86	7.677													
42		A	O	42					ON	14.90	4.116													

1 7 13 19 25 31 37 43 49 55 61 67 7576

COEFFICIENTS: SA: -8, -6, -4, -2, 0, 2, 4, 6, 8

OF B SB: -7, -5, -3, -1, 1, 3, 5, 7

SCHEDULES 1, 2, 3, 4, 5, 6, 7

IDPVAR(1) IDPVAR(2) IDV

TABLE II. - Continued

a. TEST ARC81-710 DATA SET/RUN NUMBER (Continued)

COLLATION SUMMARY

☐ PRETEST
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		MACH NUMBERS			NO. of RUNS	PARAMETERS/VALUES					TEST RUN NUMBERS											
		A	B	2.5	3.0	3.5		WSPR	FWP	SPR	STAMP NUMBER	ANGLE	1	2	3	4	5	6	7	8	9	10	11	12
RR2043	Q, T, S	0	0		43			0°	ON	12.40	0.11	0°	-35°	+35°	0°									
44	WITH WHISTLE	0	0		44				ON	41.0	1.15													
45	WHEEL IN THE LINE	A	0		45				ON	41.0	1.15													
46		A	0			46			OFF	—	—													
47		0	0			47			OFF	—	—													
48		0	0			48			ON	13.17	4.50													
49		A	0			49			ON	13.17	4.50													
50		A	0			50			ON	23.86	1.266													
51		0	0			51			ON	27.36	0.240													
52		0	0			52			ON	41.0	1.15													
53		A	0			53			ON	41.0	1.15													
54	Q, T, S	A	0	54					OFF	—	—	110°												
55		0	0	55					OFF	—	—													
56		0	0	56					ON	31.26	9.151													
57		A	0	57					ON	31.26	9.151													
59		A	0		59				OFF	—	—													
60		0	0		60				OFF	—	—													
61		0	0		61				ON	26.16	7.679													
62		A	0		62				ON	26.16	7.679													
63		A	0			63			OFF	—	—													

1	7	13	19	25	31	37	43	49	55	61	67	73	79
IDPVAR(1) IDPVAR(2) IDV													

COEFFICIENTS:

0 OF 8

SCHEDULES

2A1-8-6-4-2, 0, 2, 4, 6, 8
3B1-7-6-4-2, 0, 2, 4, 6, 8

ORIGINAL PAGE IS
OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

TABLE II. - Continued

a. TEST AK-27-110 DATA SET/RUN NUMBER (Continued)
COLLATION SUMMARY

☐ PRETEST
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		MACH NUMBERS			NO. of RUNS	PARAMETERS/VALUES				TEST RUN NUMBERS									
		A	B	2	3	0		POWER	DP	TRUN	ANGLE										
83	064	0	B	2	3	0	3	OFF	—	—	+10°	35°	35°	0°							
65		0	B				64	ON	23.76	5.13											
66		A	0				65	ON	23.26	5.00											
67		A	0				66	ON	23.26	5.00											
68		A	0	67				ON	23.26	5.00											
69		A	0	68				ON	23.26	5.00											
70		A	0		69		70	ON	23.26	5.00											
71		A	0				71	ON	23.26	5.00											
72		A	0	72				ON	23.26	5.00											
73		A	0	73				ON	23.26	5.00											
74		A	0		74			ON	23.26	5.00											
75		A	0		75			ON	23.26	5.00											
76		A	0				76	ON	23.26	5.00											
77		A	0				77	ON	23.26	5.00											
78		A	0	78				ON	23.26	5.00											
79		A	0		79			ON	23.26	5.00											
80		A	0				80	ON	23.26	5.00											
81		A	0				81	ON	23.26	5.00											
82		A	0	82				ON	23.26	5.00											
83		A	0		83			ON	23.26	5.00											

7 13 19 25 31 37 43 49 55 61 67 75 76

COEFFICIENTS: 0A-3-6-4-2-0-3-4-6-7
 a or b 3-2-7-5-2-3-4-6-7
 SCHEDULES

↑ IDPVAR(1) IDPVAR(2) INDV

a. TEST ARC 87-710 DATA SET/RUN NUMBER (Continued)

COLLATION SUMMARY

☐ PRETEST ☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		MACH NUMBERS			NO. of RUNS	PARAMETERS/VALUES								TEST RUN NUMBERS
		A	B	2.5	3.0	3.5		POWER	PR	PR	PR	PR	PR	PR	PR	
RBZ084	DATA	A	0			84		ON	23.00	0°	0°	0°	0°	0°	0°	0°
85	DATA	A	0			85		OFF	—	+11°	+11°	+11°	+11°	+7°	+7°	
86		B	0			86		OFF	—	—	—	—	—	—	—	
87		B	0			87		ON	26.00	0°	0°	0°	0°	0°	0°	
88		A	0			88		ON	26.00	0°	0°	0°	0°	0°	0°	
89		A	0			89		OFF	—	—	—	—	—	—	—	
90		B	0			90		OFF	—	—	—	—	—	—	—	
91		B	0			91		ON	23.00	0°	0°	0°	0°	0°	0°	
92		A	0			92		ON	23.00	0°	0°	0°	0°	0°	0°	
93		A	0			93		OFF	—	—	—	—	—	—	—	
94		B	0			94		OFF	—	—	—	—	—	—	—	
95		B	0			95		ON	23.00	0°	0°	0°	0°	0°	0°	
96		A	0			96		ON	23.00	0°	0°	0°	0°	0°	0°	
97		A	0			97		OFF	—	-11°	-8°	-8°	-8°	-7°	-7°	
98		B	0			98		OFF	—	—	—	—	—	—	—	
99		A	0			99		ON	23.00	0°	0°	0°	0°	0°	0°	
100		B	0			100		ON	23.00	0°	0°	0°	0°	0°	0°	
101		B	0			101		OFF	—	—	—	—	—	—	—	
102		A	0			102		OFF	—	—	—	—	—	—	—	
103		A	0			103		ON	26.00	0°	0°	0°	0°	0°	0°	

COEFFICIENTS:

Page 8

SCHEDULES

ORIGINAL PAGE IS
OF POOR QUALITY

TABLE II. - Continued

a. TEST ARC 87-710 DATA SET/RUN NUMBER (Continued)

COLLATION SUMMARY

☐ PRETEST
☒ POSTTEST

DATA SET IDENTIFIER		CONFIGURATION	SCHD.		MACH NUMBERS			NO. of RUNS	PARAMETERS/VALUES						TEST RUN NUMBERS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
			a	b	2.5	3.0	3.5		PR	SEMP	GP1	GP2	GP3	GP4	GP5	GP6	GP7	GP8	GP9	GP10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
RBZ 104		ϕ, T, S_1	0	B					ON	7679	-11°	-8°	-3.5°	-8°	+3.5°	-7°																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										</

COEFFICIENTS: ϕ, T, S_1, S_2, S_3
a or b
SCHEDULES

TABLE II. - Concluded

a. TEST APC 7-710 DATA SET/RUN NUMBER (Concluded)

COLLATION SUMMARY

☐ PRETEST
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		MACH NUMBERS			NO. of RUNS	PARAMETERS/VALUES						TEST RUN NUMBERS											
		1	2	2.5	3.0	3.5		TEMP	GY2	GY3	L														
124	φ ₁ T ₁	0	B			124		ON	23.26	-	-3.5	12.5	0												
125	φ ₂ T ₁	A	0			125		ON	23.16	-															
126	φ ₂ T ₁	A	0			126		ON	23.16	-															
127	φ ₄ T ₁	A	0			127		ON	23.16	-															
128	φ ₁ T ₁ - MACH 3.5	A	0			128		OFF	-	-															
129	GREATER AND JEM	0	B			129		OFF	-	-															
130	SOLID PLUMES	0	B			130		ON	-	-															
131	φ ₁ T ₁	A	0			131		ON	-	-															
132	φ ₁ T ₁ OIL FLOW	0	0			132		ON/OFF	23.16	226															
133	φ ₁ T ₁	0	D			133		ON/OFF	23.16	226															

1 7 13 19 25 31 37 43 49 55 61 67 73 76

COEFFICIENTS: 2.0, -1.8, -4.0, 4.0

a or b 2.0, -1.8, -4.0, 4.0

SCHEDULES

↑ IDPVAR(1) IDPVAR(2) NDV

Table 11 (Cont'd)

B. 0.019 Scale Jet Flame Model Orbiter Pressure Nozzle Table

M₀ = 2.5

(Bottom Left)

X	DISTANCE FORWARD OF NOZZLE EXIT									
	1.1"					1.2"				
	TAP NO.	RUN NO.	POWER ON	POWER OFF	# N	TAP NO.	RUN NO.	POWER ON	POWER OFF	# N
0	0	27	30	29	30	25	15	14	13	120
10	30	11	13	14	15	16	19	22	21	150
20	60	12	14	15	16	17	20	23	22	150
30	90	13	15	16	17	18	21	24	23	150
40	120	14	16	17	18	19	22	25	24	150
50	150	15	17	18	19	20	23	26	25	150
60	180	16	18	19	20	21	24	27	26	150
70	210	17	19	20	21	22	25	28	27	150
80	240	18	20	21	22	23	26	29	28	150
90	270	19	21	22	23	24	27	30	29	150
100	300	20	22	23	24	25	28	31	30	150
110	330	21	23	24	25	26	29	32	31	150
120	360	22	24	25	26	27	30	33	32	150
130	390	23	25	26	27	28	31	34	33	150
140	420	24	26	27	28	29	32	35	34	150
150	450	25	27	28	29	30	33	36	35	150
160	480	26	28	29	30	31	34	37	36	150
170	510	27	29	30	31	32	35	38	37	150
180	540	28	30	31	32	33	36	39	38	150
190	570	29	31	32	33	34	37	40	39	150
200	600	30	32	33	34	35	38	41	40	150
210	630	31	33	34	35	36	39	42	41	150
220	660	32	34	35	36	37	40	43	42	150
230	690	33	35	36	37	38	41	44	43	150
240	720	34	36	37	38	39	42	45	44	150
250	750	35	37	38	39	40	43	46	45	150
260	780	36	38	39	40	41	44	47	46	150
270	810	37	39	40	41	42	45	48	47	150
280	840	38	40	41	42	43	46	49	48	150
290	870	39	41	42	43	44	47	50	49	150
300	900	40	42	43	44	45	48	51	50	150
310	930	41	43	44	45	46	49	52	51	150
320	960	42	44	45	46	47	50	53	52	150
330	990	43	45	46	47	48	51	54	53	150
340	1020	44	46	47	48	49	52	55	54	150
350	1050	45	47	48	49	50	53	56	55	150
360	1080	46	48	49	50	51	54	57	56	150
370	1110	47	49	50	51	52	55	58	57	150
380	1140	48	50	51	52	53	56	59	58	150
390	1170	49	51	52	53	54	57	60	59	150
400	1200	50	52	53	54	55	58	61	60	150
410	1230	51	53	54	55	56	59	62	61	150
420	1260	52	54	55	56	57	60	63	62	150
430	1290	53	55	56	57	58	61	64	63	150
440	1320	54	56	57	58	59	62	65	64	150
450	1350	55	57	58	59	60	63	66	65	150
460	1380	56	58	59	60	61	64	67	66	150
470	1410	57	59	60	61	62	65	68	67	150
480	1440	58	60	61	62	63	66	69	68	150
490	1470	59	61	62	63	64	67	70	69	150
500	1500	60	62	63	64	65	68	71	70	150
510	1530	61	63	64	65	66	69	72	71	150
520	1560	62	64	65	66	67	70	73	72	150
530	1590	63	65	66	67	68	71	74	73	150
540	1620	64	66	67	68	69	72	75	74	150
550	1650	65	67	68	69	70	73	76	75	150
560	1680	66	68	69	70	71	74	77	76	150
570	1710	67	69	70	71	72	75	78	77	150
580	1740	68	70	71	72	73	76	79	78	150
590	1770	69	71	72	73	74	77	80	79	150
600	1800	70	72	73	74	75	78	81	80	150
610	1830	71	73	74	75	76	79	82	81	150
620	1860	72	74	75	76	77	80	83	82	150
630	1890	73	75	76	77	78	81	84	83	150
640	1920	74	76	77	78	79	82	85	84	150
650	1950	75	77	78	79	80	83	86	85	150
660	1980	76	78	79	80	81	84	87	86	150
670	2010	77	79	80	81	82	85	88	87	150
680	2040	78	80	81	82	83	86	89	88	150
690	2070	79	81	82	83	84	87	90	89	150
700	2100	80	82	83	84	85	88	91	90	150
710	2130	81	83	84	85	86	89	92	91	150
720	2160	82	84	85	86	87	90	93	92	150
730	2190	83	85	86	87	88	91	94	93	150
740	2220	84	86	87	88	89	92	95	94	150
750	2250	85	87	88	89	90	93	96	95	150
760	2280	86	88	89	90	91	94	97	96	150
770	2310	87	89	90	91	92	95	98	97	150
780	2340	88	90	91	92	93	96	99	98	150
790	2370	89	91	92	93	94	97	100	99	150
800	2400	90	92	93	94	95	98	101	100	150
810	2430	91	93	94	95	96	99	102	101	150
820	2460	92	94	95	96	97	100	103	102	150
830	2490	93	95	96	97	98	101	104	103	150
840	2520	94	96	97	98	99	102	105	104	150
850	2550	95	97	98	99	100	103	106	105	150
860	2580	96	98	99	100	101	104	107	106	150
870	2610	97	99	100	101	102	105	108	107	150
880	2640	98	100	101	102	103	106	109	108	150
890	2670	99	101	102	103	104	107	110	109	150
900	2700	100	102	103	104	105	108	111	110	150
910	2730	101	103	104	105	106	109	112	111	150
920	2760	102	104	105	106	107	110	113	112	150
930	2790	103	105	106	107	108	111	114	113	150
940	2820	104	106	107	108	109	112	115	114	150
950	2850	105	107	108	109	110	113	116	115	150
960	2880	106	108	109	110	111	114	117	116	150
970	2910	107	109	110	111	112	115	118	117	150
980	2940	108	110	111	112	113	116	119	118	150
990	2970	109	111	112	113	114	117	120	119	150
1000	3000	110	112	113	114	115	118	121	120	150
1010	3030	111	113	114	115	116	119	122	121	150
1020	3060	112	114	115	116	117	120	123	122	150
1030	3090	113	115	116	117	118	121	124	123	150
1040	3120	114	116	117	118	119	122	125	124	150
1050	3150	115	117	118	119	120	123	126	125	150
1060	3180	116	118	119	120	121	124	127	126	150
1070	3210	117	119	120	121	122	125	128	127	150
1080	3240	118	120	121	122	123	126	129	128	150
1090	3270	119	121	122	123	124	127	130	129	150
1100	3300	120	122	123	124	125	128	131	130	150

*TAP 216 WAS BAD THROUGHOUT THE TEST

ORIGINAL PAGE IS
OF LOWER QUALITY

Table II (Cont'd)

E. 0.019 SCALE JET PLUME MODEL ORBITER PRE-SURE NOZZLE TABLE
(BOTTOM RIGHT)

M = 2.5

X 1/2	DISTANCE FORWARD OF NOZZLE EXIT																			
	.12"					.14"					.17"					1.0"				
VARIABLE	.062					.082					.106					.580				
	TAP NO.	POWER ON	POWER OFF	RUN NO.	TAP NO.	TAP NO.	POWER ON	POWER OFF	RUN NO.	TAP NO.	TAP NO.	POWER ON	POWER OFF	RUN NO.	TAP NO.	TAP NO.	POWER ON	POWER OFF	RUN NO.	TAP NO.
0	0	21	30	30	36	30	36	10	9	60	35	11	13	15	15	15	15	15	15	15
30	30	21	29	29	36	30	36	10	9	60	35	11	13	15	15	15	15	15	15	15
60	60	21	29	29	36	30	36	10	9	60	35	11	13	15	15	15	15	15	15	15
90	90	21	29	29	36	30	36	10	9	60	35	11	13	15	15	15	15	15	15	15
120	120	21	29	29	36	30	36	10	9	60	35	11	13	15	15	15	15	15	15	15
150	150	21	29	29	36	30	36	10	9	60	35	11	13	15	15	15	15	15	15	15
180	180	21	29	29	36	30	36	10	9	60	35	11	13	15	15	15	15	15	15	15
210	210	21	29	29	36	30	36	10	9	60	35	11	13	15	15	15	15	15	15	15
240	240	21	29	29	36	30	36	10	9	60	35	11	13	15	15	15	15	15	15	15
270	270	21	29	29	36	30	36	10	9	60	35	11	13	15	15	15	15	15	15	15
300	300	21	29	29	36	30	36	10	9	60	35	11	13	15	15	15	15	15	15	15
330	330	21	29	29	36	30	36	10	9	60	35	11	13	15	15	15	15	15	15	15

0.019 Scale Jet Plume Model Orbit Pressure Nozzle Table (Top Nozzle)

 $M_{\infty} = 2.5$

(Top Hole)

DISTANCE FORWARD OF NOZZLE UNIT												
1.0"			1.3"			1.6"			1.9"			
.950			.950			.950			.950			
TAP NO.			TAP NO.			TAP NO.			TAP NO.			
POWER ON			POWER ON			POWER ON			POWER ON			
POWER OFF			POWER OFF			POWER OFF			POWER OFF			
RUN NO.			RUN NO.			RUN NO.			RUN NO.			
1	10	9	10	9	10	9	10	9	10	9	10	9
2	12	11	12	11	12	11	12	11	12	11	12	11
3	13	12	13	12	13	12	13	12	13	12	13	12
4	14	13	14	13	14	13	14	13	14	13	14	13
5	15	14	15	14	15	14	15	14	15	14	15	14
6	16	15	16	15	16	15	16	15	16	15	16	15
7	17	16	17	16	17	16	17	16	17	16	17	16
8	18	17	18	17	18	17	18	17	18	17	18	17
9	19	18	19	18	19	18	19	18	19	18	19	18
10	20	19	20	19	20	19	20	19	20	19	20	19
11	21	20	21	20	21	20	21	20	21	20	21	20
12	22	21	22	21	22	21	22	21	22	21	22	21
13	23	22	23	22	23	22	23	22	23	22	23	22
14	24	23	24	23	24	23	24	23	24	23	24	23
15	25	24	25	24	25	24	25	24	25	24	25	24
16	26	25	26	25	26	25	26	25	26	25	26	25
17	27	26	27	26	27	26	27	26	27	26	27	26
18	28	27	28	27	28	27	28	27	28	27	28	27
19	29	28	29	28	29	28	29	28	29	28	29	28
20	30	29	30	29	30	29	30	29	30	29	30	29
21	31	30	31	30	31	30	31	30	31	30	31	30
22	32	31	32	31	32	31	32	31	32	31	32	31
23	33	32	33	32	33	32	33	32	33	32	33	32
24	34	33	34	33	34	33	34	33	34	33	34	33
25	35	34	35	34	35	34	35	34	35	34	35	34
26	36	35	36	35	36	35	36	35	36	35	36	35
27	37	36	37	36	37	36	37	36	37	36	37	36
28	38	37	38	37	38	37	38	37	38	37	38	37
29	39	38	39	38	39	38	39	38	39	38	39	38
30	40	39	40	39	40	39	40	39	40	39	40	39
31	41	40	41	40	41	40	41	40	41	40	41	40
32	42	41	42	41	42	41	42	41	42	41	42	41
33	43	42	43	42	43	42	43	42	43	42	43	42
34	44	43	44	43	44	43	44	43	44	43	44	43

ORIGINAL PAGE IS
OF POOR QUALITY

Nozzle Pressure Data

TEST: ARC 87-710 (IA12C)

[illegible]

- | | ROZA | DATA SETS | CONTAIN | UPPER | MPS NOZZLE DATA |
|---|---------|-----------|---------|-------|---------------------------|
| • | ROZA -- | DATA SETS | CONTAIN | LOWER | LEFTHAND MPS NOZZLE DATA |
| | ROZB -- | DATA SETS | CONTAIN | LOWER | RIGHTHAND MPS NOZZLE DATA |
| | ROZC -- | DATA SETS | CONTAIN | LOWER | RIGHTHAND MPS NOZZLE DATA |

TABLE III. - MODEL COMPONENT DIMENSIONAL DATA

MODEL COMPONENT: B10 - BodyGENERAL DESCRIPTION: Fuselage, 2A Configuration, Lightweight Orbiter per
Rockwell Lines VL70-000089 "B".Scale Model = 0.019DRAWING NUMBER:VL70-000089 "B"
VL70-000092, 93, 94 "A"
SS-A-00092DIMENSIONS:

	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length ~ in.	<u>1328.3</u>	<u>25.238</u>
Max. Width ~ in. ($\theta X_0 = 1528.3$)	<u>265.0</u>	<u>5.035</u>
Max. Depth ~ in. ($\theta X_0 = 1480.52$)	<u>248.0</u>	<u>4.712</u>
Fineness Ratio	<u>5.012</u>	<u>5.012</u>
Area ~ Ft. ²		
Max. Cross-Sectional	<u>456.4</u>	<u>0.1648</u>
Planform	<u>-</u>	<u>-</u>
Wetted	<u>-</u>	<u>-</u>
Base	<u>-</u>	<u>-</u>

TABLE III. - Continued.

MODEL COMPONENT: C5 Orbiter Canopy

GENERAL DESCRIPTION: Orbiter Canopy for Light Weight Orbiter Configuration

Model Scale = 0.019

DRAWING NUMBER: VL-70-000092

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
STA. FWD. Bulkhead, in	<u>391.0</u>	<u>7.429</u>
STA. T.E., in	<u>560.0</u>	<u>10.640</u>
Canopy/Body Intersection, IN	<u>391.0</u>	<u>7.429</u>

TABLE III. - Continued.

MODEL COMPONENT: D7 - Manipulator HousingGENERAL DESCRIPTION: 2A Configuration Per Rockwell Lines VL70-000093Scale Model = 0.019DRAWING NUMBER: VL70-000093; SS-A-00092

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length ~ in.	<u>881.0</u>	<u>16.739</u>
Max. Width ~ in.	<u>51.0</u>	<u>0.969</u>
Max. Depth ~ in.	<u>23.0</u>	<u>0.437</u>
Fineness Ratio	<u>-</u>	<u>-</u>
Area		
Max. Cross-Sectional	<u>-</u>	<u>-</u>
Planform	<u>-</u>	<u>-</u>
Wetted	<u>-</u>	<u>-</u>
Base	<u>-</u>	<u>-</u>

Location at:

‡ Fuselage BP = 0.0
 WP = 500.0 INFS
 X₀426.0 to X₀1307.0 INFS

TABLE III. - Continued.

MODEL COMPONENT: F4 Body FlapGENERAL DESCRIPTION: Aft Body Flap Used on Light Weight Orbiter ConfigurationModel Scale = 0.019DRAWING NUMBER: VL-70-000094 "A", SS-A-00092

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length, in	<u>84.70</u>	<u>1.609</u>
Max. Width, in	<u>265.00</u>	<u>5.035</u>
Max. Depth	<u>-</u>	<u>-</u>
Fineness Ratio	<u>-</u>	<u>-</u>
Area, ft^2		
Max. Cross-Sectional	<u>-</u>	<u>-</u>
Planform	<u>142.64</u>	<u>0.05149</u>
Wetted	<u>-</u>	<u>-</u>
Base	<u>38.65</u>	<u>0.01395</u>

TABLE III. - Continued.

MODEL COMPONENT: M₃ - OMS POD

GENERAL DESCRIPTION: 2A Lightweight Orbiter Configuration per Rockwell Lines
VL70-000094 "A"

Scale Model = 0.019

DRAWING NUMBER: VL70-000094 "A"; SS-A-00092

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length ~ in.	<u>346.0</u>	<u>6.574</u>
Max. Width ~ in. @ X ₀ 1450.0	<u>108.0</u>	<u>2.052</u>
Max. Depth ~ in. @ X ₀ 1500.0	<u>113.8</u>	<u>2.162</u>
Finessess Ratio	<u>-</u>	<u>-</u>
Area		
Max. Cross-Sectional	<u>-</u>	<u>-</u>
Planform	<u>-</u>	<u>-</u>
Wetted	<u>-</u>	<u>-</u>
Base	<u>-</u>	<u>-</u>

ϕ of OMS POD
 $Z_0 = 463.9$ INFS: $WP400 + 63.9 = 463.9$ INFS
 $Y_0 = 80.0$ INFS
 Length: X_0 1214.0 to X_0 1560.0 = 346.0 INFS

TABLE III. - Continued.

MODEL COMPONENT: NOZZLES - NgGENERAL DESCRIPTION: Basic OMS nozzle of configuration 2A per Rockwell LinesVL70-008306 and VL70-000089"B". Intersection of nozzle exit plane andnozzle centerline at $X_0 = 1570.75$, $Y_0 = +99.25$, $Z_0 = 507.25$

MODEL SCALE = .019

DRAWING NO. VL70-008306, VL70-000089"B", SS-A00092

<u>DIMENSIONS</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Mach No. _____		
Length ~ in.		
Gimbal Point to Exit Plane	_____	_____
Throat to Exit Plane	_____	_____
Diameter ~ in.		
Exit	<u>50.00</u>	<u>0.950</u>
Throat	<u>N/A</u>	<u>N/A</u>
Inlet	<u>28.00</u>	<u>0.532</u>
Area ~ ft. ² /Nozzle		
Exit	<u>13.635</u>	<u>0.00493</u>
Throat	_____	_____
Gimbal Point (station) ~ in.		
X	<u>1518.0</u>	<u>28.842</u>
Y	<u>+88.0</u>	<u>1.672</u>
Z	<u>492.0</u>	<u>9.348</u>
Null Position ~ deg.		
Pitch	<u>15°49'</u>	<u>15°49'</u>
Yaw (Outb'd)	<u>+12°17'</u>	<u>+12°17'</u>

TABLE III. - Continued

MODEL COMPONENT: MPS NOZZLES - N9

GENERAL DESCRIPTION: Orbiter nozzles used for cold plume simulation at M = 0.9,
1.25, 1.55, 2.0, 3.0 and 3.5. All (3) nozzles are mounted to ball sockets
with gimbal angles of $\pm 11^\circ$ pitch and $\pm 9^\circ$ yaw from null.

MODEL SCALE = .019DRAWING NO. SS-A00092; SS-A00095

<u>DIMENSIONS</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Mach No. <u>0.9 thru 3.5</u>		
Length ~ in.		
Gimbal Point to Exit Plane		
Throat to Exit Plane		
Diameter ~ in.		
Exit	<u>90.730</u>	<u>1.7238</u>
Throat	<u>28.126</u>	<u>0.5344</u>
Inlet	<u>37.336</u>	<u>0.7094</u>
Area ~ ft ² . /Nozzle		
Exit	<u>44.896</u>	<u>0.0162</u>
Throat		
Gimbal Point (station) ~ in.		
Upper Nozzle		
X	<u>1445.0</u>	<u>27.455</u>
Y	<u>0.0</u>	<u>0.0</u>
Z	<u>443.0</u>	<u>8.417</u>
Lower Nozzles		
X	<u>1467.9</u>	<u>27.890</u>
Y	<u>53.0</u>	<u>1.007</u>
Z	<u>342.6</u>	<u>6.510</u>
Null Position ~ deg.		
Upper Nozzle		
Pitch	<u>16°</u>	<u>16°</u>
Yaw	<u>0°</u>	<u>0°</u>
Lower Nozzles		
Pitch	<u>10°</u>	<u>10°</u>
Yaw (outb'd)	<u>3.5°</u>	<u>3.5°</u>

TABLE III. - Continued..

MODEL COMPONENT: MIS NOZZLES - N10GENERAL DESCRIPTION: Same as N9 except each nozzle has (12) external static
pressure taps on their surfacesMODEL SCALE = .019DRAWING NO. SS-A00092, SS-A00095

<u>DIMENSIONS</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Mach No. _____		
Length ~ in.		
Gimbal Point to Exit Plane	_____	_____
Throat to Exit Plane	_____	_____
Diameter ~ in.		
Exit	_____	_____
Throat	_____	_____
Inlet	_____	_____
Area ~ ft ² .		
Exit	_____	_____
Throat	_____	_____
Gimbal Point (station) ~ in.		
Upper Nozzle		
X	_____	_____
Y	_____	_____
Z	_____	_____
Lower Nozzles		
X	_____	_____
Y	_____	_____
Z	_____	_____
Null Position ~ deg.		
Upper Nozzle		
Pitch	_____	_____
Yaw	_____	_____
Lower Nozzles		
Pitch	_____	_____
Yaw	_____	_____

TABLE III. - Continued.

MODEL COMPONENT: NOZZLES - N17GENERAL DESCRIPTION: BSRM Nozzle ($\theta_N = 11^\circ$) used for cold jet plume simulation
at M = .9 and 1.2 ($\gamma = 7.0$)MODEL SCALE = 0.019DRAWING NO. SS-A00110

<u>DIMENSIONS</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Mach No. <u>.9, 1.2</u>		
Length ~ in.		
Gimbal Point to Exit Plane		
Throat to Exit Plane		
Diameter ~ in./Nozzle		
Exit	<u>141.684</u>	<u>2.692</u>
Throat	<u>53.611</u>	<u>1.019</u>
Inlet	<u>69.316</u>	<u>1.317</u>
Area ~ ft ² ./Nozzle		
Exit	<u>109.489</u>	<u>0.0395</u>
Throat		
Gimbal Point (station) ~ in.		
X	<u>2338.790</u>	<u>44.439</u>
Y	<u>+243.000</u>	<u>+4.617</u>
Z	<u>400.000</u>	<u>7.600</u>
Null Position ~ deg.		
Pitch	<u>0°</u>	<u>0°</u>
Yaw	<u>0°</u>	<u>0°</u>

TABLE III. - Continued.

MODEL COMPONENT: NOZZLES - N 18GENERAL DESCRIPTION: BSRM Nozzle ($\theta_N = 24.4^\circ$) used for cold jet plume simulation
at M = 3.0 and M = 3.5MODEL SCALE = .019DRAWING NO. SS-A00110DIMENSIONSFULL SCALEMODEL SCALEMach No. 2.5, 3.0, 3.5

Length ~ in.

Gimbal Point to Exit Plane

Throat to Exit Plane

Diameter ~ in.

Exit

Throat

Inlet

Area ~ ft² / Nozzle

Exit

Throat

Gimbal Point (station) ~ in.

X

Y

Z

Null Position ~ deg.

Pitch

Yaw

141.68453.61169.316109.4892338.790+243.000400.0000°0°2.6921.01861.3170.039544.437+4.6177.6000°0°

TABLE III. - Continued.

MODEL COMPONENT: NOZZLES - N29

GENERAL DESCRIPTION: BSRM Nozzles mismatched on left and right side, i.e., left
nozzle contour and location same as N18 and right nozzle contour and locations
same as N17 ($\epsilon = 7.0$)

MODEL SCALE = .019DRAWING NO. SS-A00110DIMENSIONSFULL SCALEMODEL SCALE

Mach No. _____

Length ~ in.

Gimbal Point to Exit Plane _____

Throat to Exit Plane _____

Diameter ~ in.

Exit _____

Throat _____

Inlet _____

Area ~ ft².

Exit _____

Throat _____

Gimbal Point (station) ~ in.

X _____

Y _____

Z _____

Null Position ~ deg.

Pitch _____

Yaw _____

TABLE III. - Continued.

MODEL COMPONENT: NOZZLES - N30GENERAL DESCRIPTION: BSRM Nozzle same as N18 except moved forward 71" full scale.Gimbal point also moved forward 71". Used for Mach No. 's 2.5, 3.0, and 3.5($\epsilon = 7.0$)MODEL SCALE = .019DRAWING NO. SS-A00110DIMENSIONSFULL SCALEMODEL SCALE

Mach No. _____

Length ~ in.

Gimbal Point to Exit Plane

Throat to Exit Plane

Diameter ~ in.

Exit

Throat

Inlet

Area ~ ft².

Exit

Throat

Gimbal Point (station) ~ in.

X

Y

Z

Null Position ~ deg.

Pitch

Yaw

TABLE III. - Continued.

MODEL COMPONENT: VERTICAL - V5 (Light Wt. Orbiter Configuration)GENERAL DESCRIPTION: Centerline Vertical Tail, Double Wedge Airfoil with
Rounded Leading EdgeModel Scale = 0.019DRAWING NUMBER:VL-70-000095; SS-A-00092DIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATA

Area (Theo) Ft^2	<u>413.25</u>	<u>0.1492</u>
Planform	<u>-</u>	<u>-</u>
Span (Theo) In	<u>315.72</u>	<u>5.999</u>
Aspect Ratio	<u>1.675</u>	<u>1.675</u>
Rate of Taper	<u>0.507</u>	<u>0.507</u>
Taper Ratio	<u>0.404</u>	<u>0.404</u>
Sweep Back Angles, degrees		
Leading Edge	<u>45.000</u>	<u>45.000</u>
Trailing Edge	<u>26.249</u>	<u>26.249</u>
0.25 Element Line	<u>41.130</u>	<u>41.130</u>
Chords: Inches		
Root (Theo) WP	<u>269.50</u>	<u>5.102</u>
Tip (Theo) WP	<u>108.47</u>	<u>2.061</u>
MAC	<u>199.81</u>	<u>3.796</u>
Fus. Sta. of .25 MAC	<u>1463.50</u>	<u>27.807</u>
W. P. of .25 MAC	<u>635.52</u>	<u>12.075</u>
B. L. of .25 MAC	<u>0.0</u>	<u>0.0</u>
Airfoil Section		
Leading Wedge Angle ~ Deg	<u>10.00</u>	<u>10.00</u>
Trailing Wedge Angle ~ Deg	<u>14.92</u>	<u>14.92</u>
Leading Edge Radius, IN	<u>2.00</u>	<u>0.038</u>
Void Area ~ Ft^2	<u>13.17</u>	<u>0.00475</u>
Blanketed Area ~ Ft^2	<u>12.67</u>	<u>0.00457</u>

TABLE III. - Continued.

MODEL COMPONENT: R5 - RudderGENERAL DESCRIPTION: 2A Configuration per Rockwell Lines VL 70-000095.Scale Model = 0.019DRAWING NUMBER: VL70-000095 SS-A00091, '92

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area ~ Ft ²	<u>106.38</u>	<u>0.0394</u>
Span (equivalent) ~ IN	<u>201.0</u>	<u>3.819</u>
Inb'd equivalent chord, IN	<u>91.585</u>	<u>1.710</u>
Outb'd equivalent chord, IN	<u>50.833</u>	<u>0.966</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>34.83</u>	<u>34.83</u>
Tailing Edge	<u>26.25</u>	<u>26.25</u>
Hingeline	<u>34.83</u>	<u>34.83</u>
Area Moment (Normal to hinge line) ~ Ft ³	<u>526.13</u>	<u>0.00361</u>
(Product of Area and Mean Chord)		

TABLE III. - Concluded.

MODEL COMPONENT: WING-W 87 Lightweight OrbiterGENERAL DESCRIPTION: Orbiter Configuration per Rockwell Lines VL70-000093

NOTE: (Dihedral angle is defined at the lower
surface of the wing at the 75.33%
element line
projected into a plane perpendicular to the PRL.)

Scale Model = 0.019

TEST NO.

DWG. NO. VL70-000093

SSA-A00091, 92

DIMENSIONS:

FULL-SCALE

MODEL SCALE

TOTAL DATA

Area (Theo.) Ft²
Planform
Span (Theo) In.
Aspect Ratio
Rate of Taper
Taper Ratio
Dihedral Angle, degrees
Incidence Angle, degrees
Aerodynamic Twist, degrees
Sweep Back Angles, degrees
Leading Edge
Trailing Edge
0.25 Element Line
Chords: ~ IN
Root (Theo) B.P.O.O.
Tip, (Theo) B.P.
MAC
Fus. Sta. of .25 MAC
W.P. of .25 MAC
B.L. of .25 MAC

2690.0	0.971
936.682	17.797
2.265	2.265
1.177	1.177
0.200	0.200
3.500	3.500
3.000	3.000
+3.000	+3.000
45.000	45.000
-10.24	-10.24
35.209	35.209
689.24	13.096
137.85	2.619
474.81	9.021
1136.89	21.601
299.20	5.685
182.13	3.460

EXPOSED DATA

Area (Theo) Ft²
Span, (Theo) In. BP108
Aspect Ratio
Taper Ratio
Chords
Root BP108
Tip 1.00 $\frac{b}{2}$
MAC
Fus. Sta. of .25 MAC
W.P. of .25 MAC
B.L. of .25 MAC

1752.29	0.633
720.68	13.693
2.058	2.058
0.2451	0.2451
562.40	10.686
137.85	2.619
393.03	7.468
1185.31	22.521
300.20	5.704
251.76	4.783

Airfoil Section (Rockwell Mod NASA)
XXXX-64

t/c @ Root $\frac{b}{2}$ = 0.425

0.10

0.10

t/c @ Tip $\frac{b}{2}$ = 1.00

0.12

0.12

Data for (1) of (2) Sides

Leading Edge Cuff
Planform Area Ft²
Leading Edge Intersects Fus M. L. @ Sta
Leading Edge Intersects Wing @ Sta

120.33	0.0036
560.0	10.640
1035.0	19.665

TABLE III. - Continued.

MODEL COMPONENT: E18 - ElevonGENERAL DESCRIPTION: 2A Configuration Per W-87 Rockwell Lines VL70-000093Data for (1) of (2) SidesScale Model = 0.019DRAWING NUMBER: VL70-000093; SS-A-00092

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area ~ ft ²	<u>205.52</u>	<u>0.0742</u>
Span (equivalent) ~ in.	<u>353.34</u>	<u>6.713</u>
Inb'd equivalent chord (B.P.115.0in), in	<u>114.78</u>	<u>2.181</u>
Outb'd equivalent chord (B.P.468.3in), in	<u>55.00</u>	<u>1.045</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.208</u>	<u>0.208</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>0.00</u>	<u>0.00</u>
Tailing Edge	<u>-10.24</u>	<u>-10.24</u>
Hingeline ($X_0 = 1387''$ F. S.)	<u>0.00</u>	<u>0.00</u>
Area Moment (Normal to hinge line) Ft ³	<u>1,548.07</u>	<u>0.01062</u>
Product of Area Moment		

NOTE: The elevon panel consists of an InBD and OutBD segment. The split line dividing the segments is at B.P. 281 inches full scale (B.P. 5.339 inches Model Scale)

TABLE III. - Continued.

MODEL COMPONENT: S6 - Booster Solid Rocket Motor**GENERAL DESCRIPTION:** Booster Solid Rocket Motor (Light Weight Orbiter Configuration) body of Revolution.Data for 1 of 2 sidesModel Scale = 0.019**DRAWING NUMBER:** VL-72-000061 'C' ; VL-77-000012 'B' ; SS-A-00094

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length (Includes Nozzle), IN	<u>1741.0</u>	<u>33.080</u>
Max. Width (Tank Dia.), IN	<u>142.0</u>	<u>2.698</u>
Max. Depth (Aft Shroud), IN	<u>259.0</u>	<u>4.921</u>
Fineness Ratio	<u>6.722</u>	<u>6.722</u>
Area , Ft ²		
Max. Cross-Sectional	<u>365.87</u>	<u>0.132</u>
Planform	<u>-</u>	<u>-</u>
Wetted	<u>-</u>	<u>-</u>
Base	<u>-</u>	<u>-</u>
W.P. of BSRM Centerline, (X _t), IN	<u>400.0</u>	<u>7.600</u>
F.S. of BSRM Nose (X _t), IN	<u>743.0</u>	<u>14.117</u>

TABLE III. - Continued.

Model Component: Solid Rocket Motor (S_{10})General Description: Booster solid rocket motor, body of revolution
Data for 1 of 2 sidesModel Scale = 0.019Drawing Number: VL77-000039

Dimensions:	<u>Full-Scale</u>	<u>Model Scale</u>
Length (includes nozzle), in.	<u>1741.0</u>	<u>33.080</u>
Max width (diameter), in.	<u>142.0</u>	<u>2.698</u>
Max depth (aft shroud diameter), in.	<u>192.0</u>	<u>3.648</u>
Fineness ratio	<u>9.0677</u>	<u>9.0677</u>
Area ~ ft ²		
Max cross-sectional	<u>201.062</u>	<u>0.0726</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>
WP of BSRM centerline, (X_T), in.	<u>400.0</u>	<u>7.600</u>
FS of BSRM nose, (X_T), in.	<u>743.0</u>	<u>14.117</u>

TABLE III. - Continued.

Model Component: Solid Rocket Motor (S_{11})General Description: Booster solid rocket motor; body of revolution; data for 1 of 2 sides. (See Figure 11.) Same as S_{10} except shifted forward71.0 inches full scale.Model Scale = 0.019Drawing Number: VL77-000039

Dimensions:	<u>Full-Scale</u>	<u>Model Scale</u>
Length (includes nozzle), in.	<u>1741.0</u>	<u>33.080</u>
Max width (diameter) in.	<u>142.0</u>	<u>2.698</u>
Max depth (aft shroud, dia) in.	<u>192.0</u>	<u>3.648</u>
Fineness ratio	<u>9.0677</u>	<u>9.0677</u>
Area - ft ²		
Max cross-sectional	<u>201.062</u>	<u>0.0726</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>
WP of BSRM centerline, (X_T), in.	<u>400.0</u>	<u>7.600</u>
FS of BSRM nose (X_T), in.	<u>672.0</u>	<u>12.768</u>

TABLE III. - Continued.

MODEL COMPONENT: T10 External TankGENERAL DESCRIPTION: External Oxygen Hydrogen TankConfiguration to which the Orbiter and the Two Solid Rocket Motors attachBody of revolutionModel Scale = 0.019DRAWING NUMBER: VL-70-000088 VL-78-000041DIMENSIONS:FULL-SCALEMODEL SCALELength, IN (Nose @ $X_t = 309.0$)1865.035.435

Max. Width (Dia.), IN

324.06.156

Max. Depth

--

Fineness Ratio

5.756175.75617Area ft^2

Max. Cross-Sectional

572.560.2067

Planform

--

Wetted

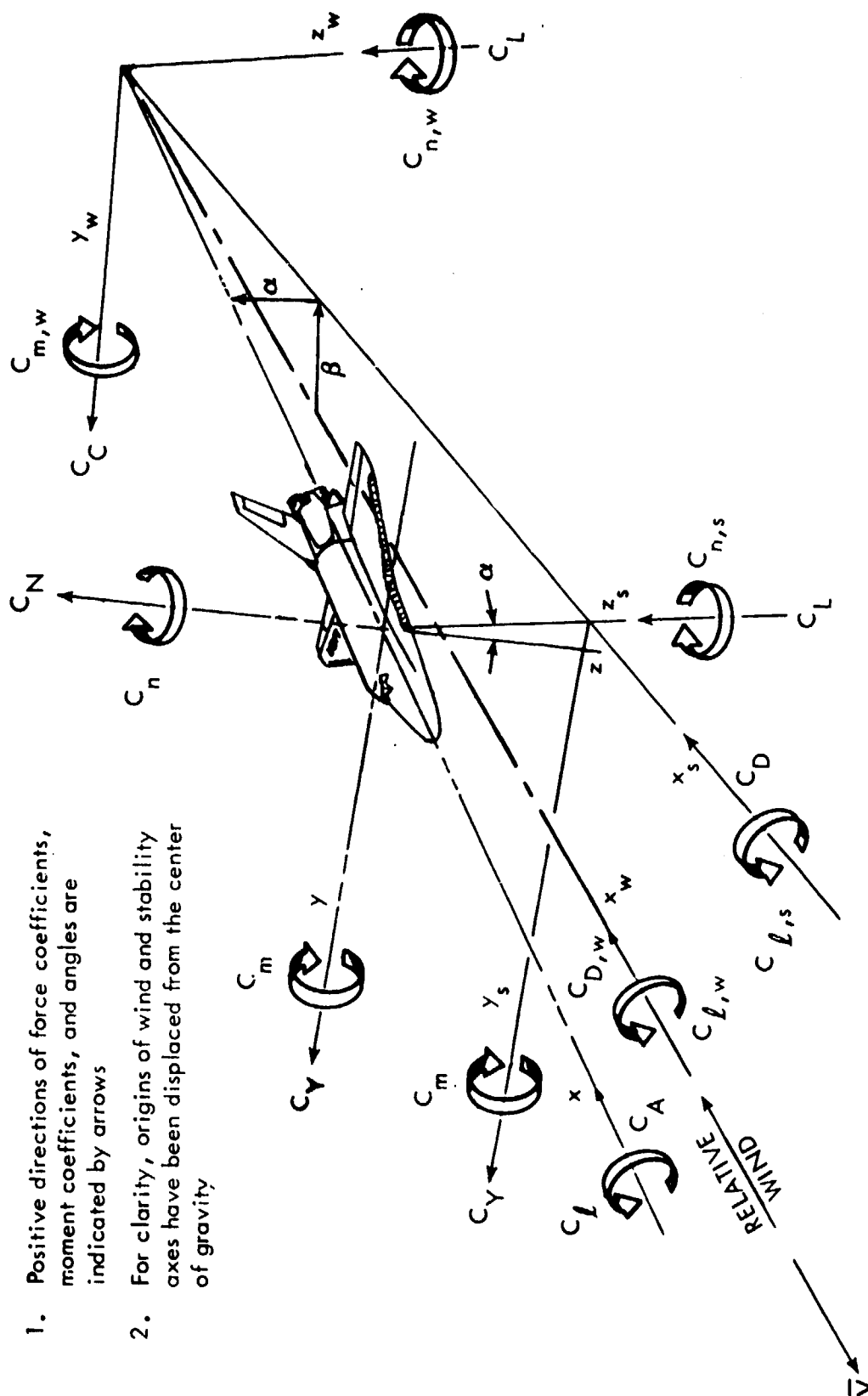
--

Base

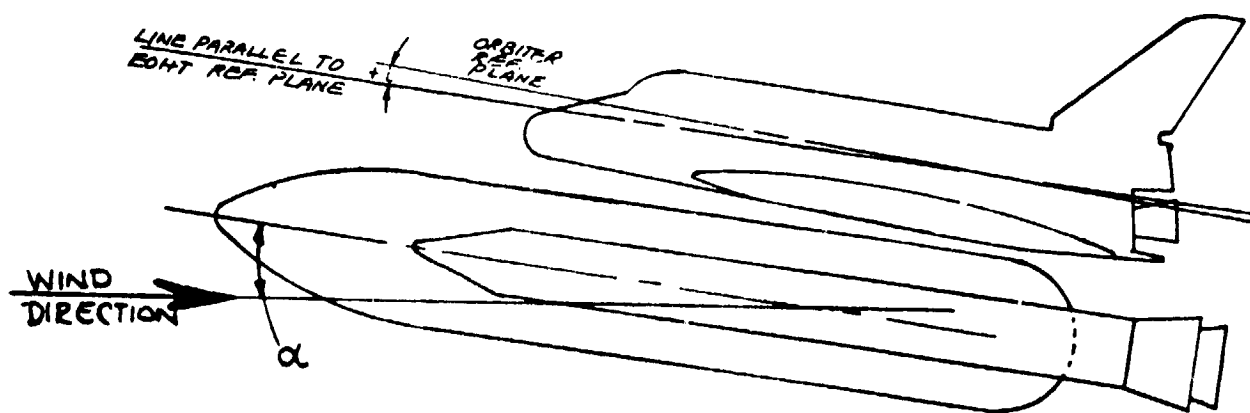
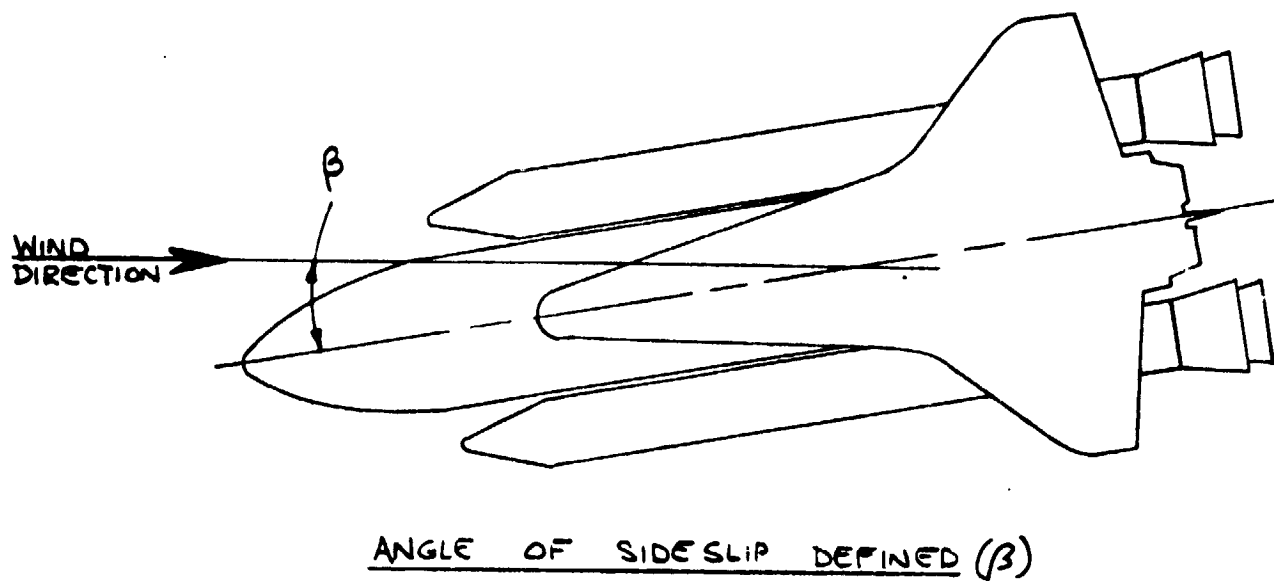
--W.P. of Tank Centerline, (X_t) IN400.07.600

Notes:

1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrows
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

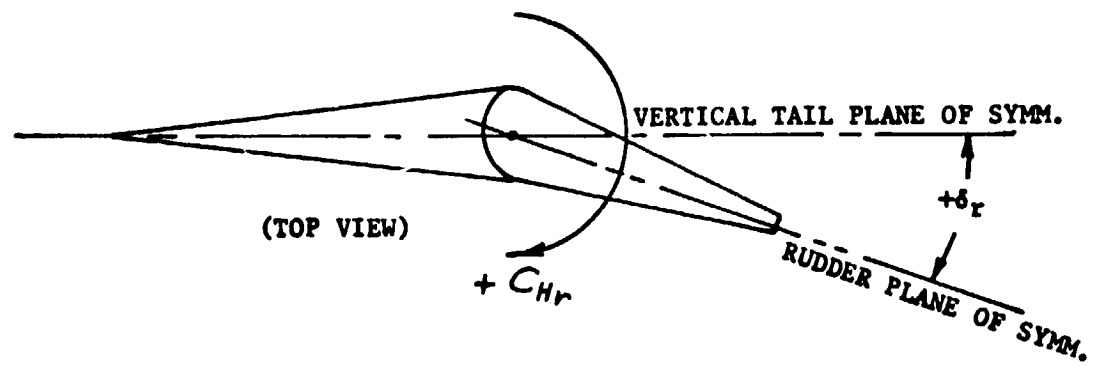


a. General
Figure 1. Axis systems.

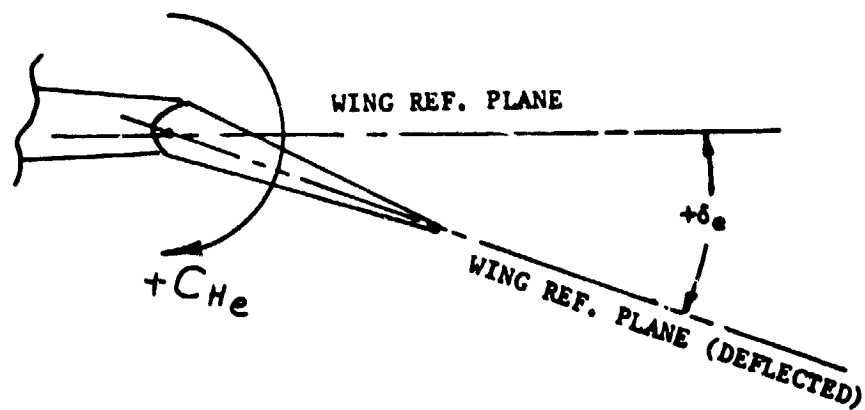


- b. (α) ANGLE OF ATTACK AND ANGLE OF INCIDENCE (i) DEFINED

Figure 1 - Continued.

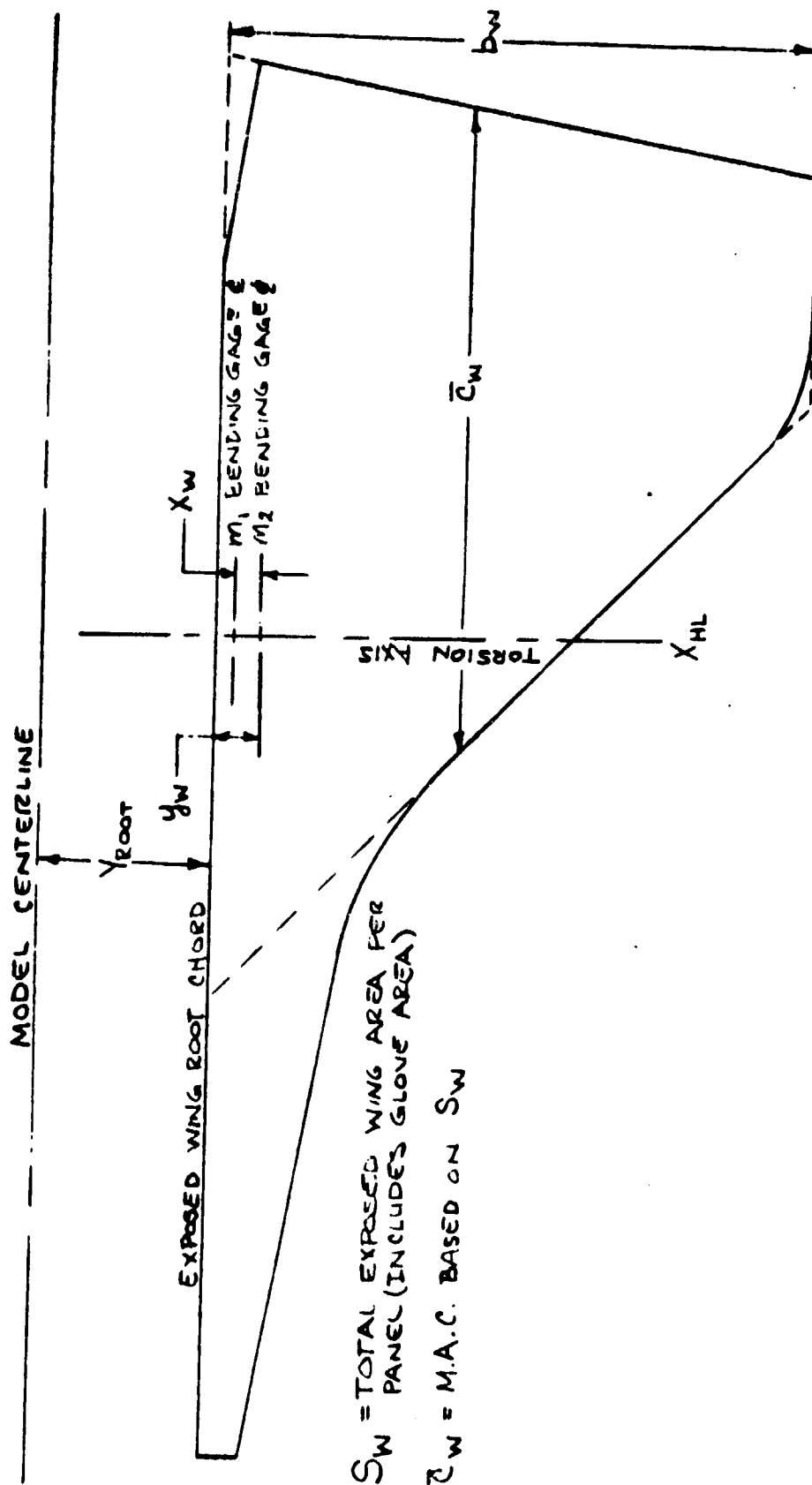


Rudder Deflection Angle (δ_r) Defined



c. Elevon Deflection Angle (δ_e) Defined

Figure 1 - Continued.



d. WING HINGE MOMENT DATA REDUCTION DIMENSIONS DEFINED

Figure 1 - Continued.

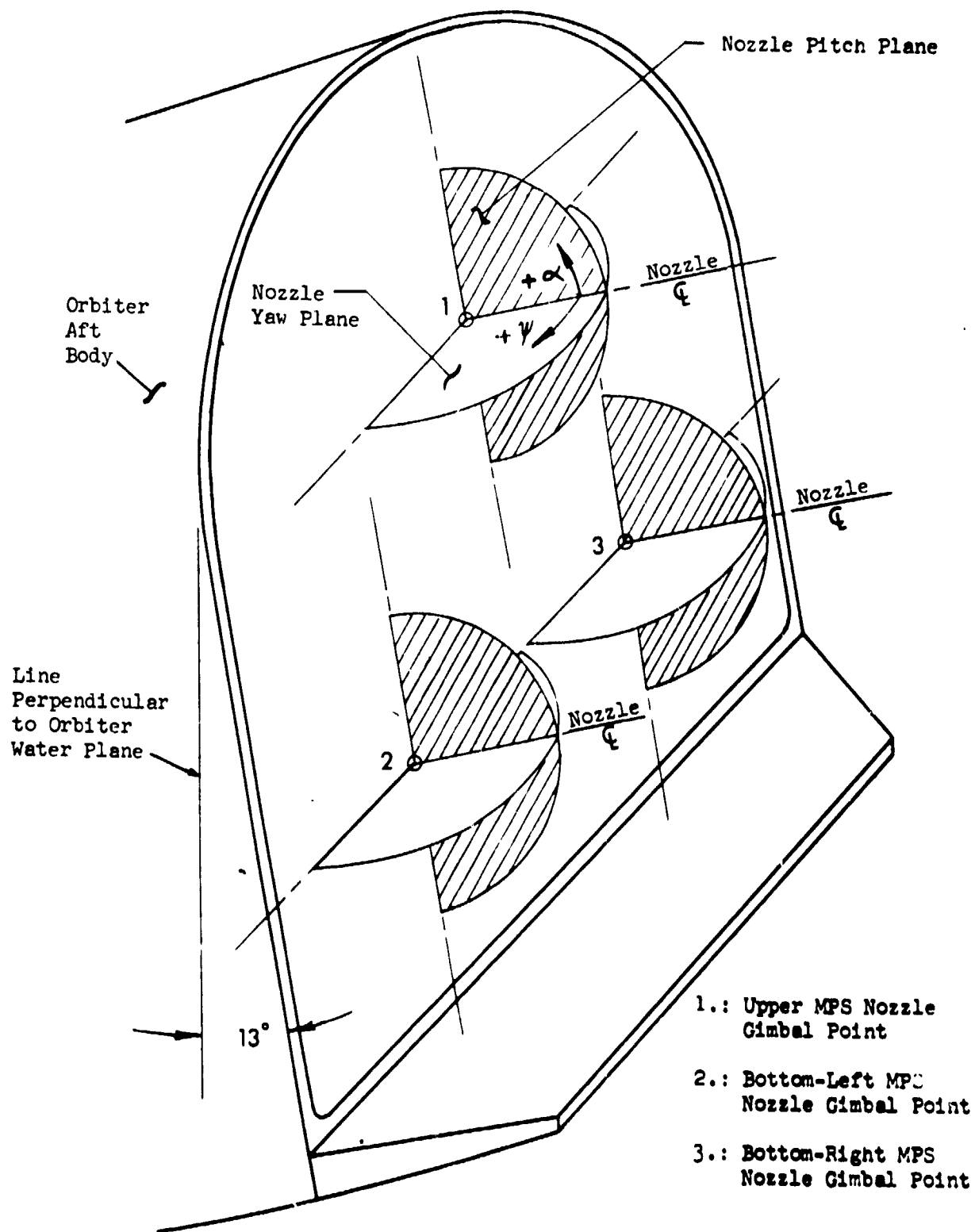


Figure 1e. Gimbal Planes and Sign Conventions

This plane is parallel to the nozzle base plate. All gimbal angles are set and measured with reference to this plane.

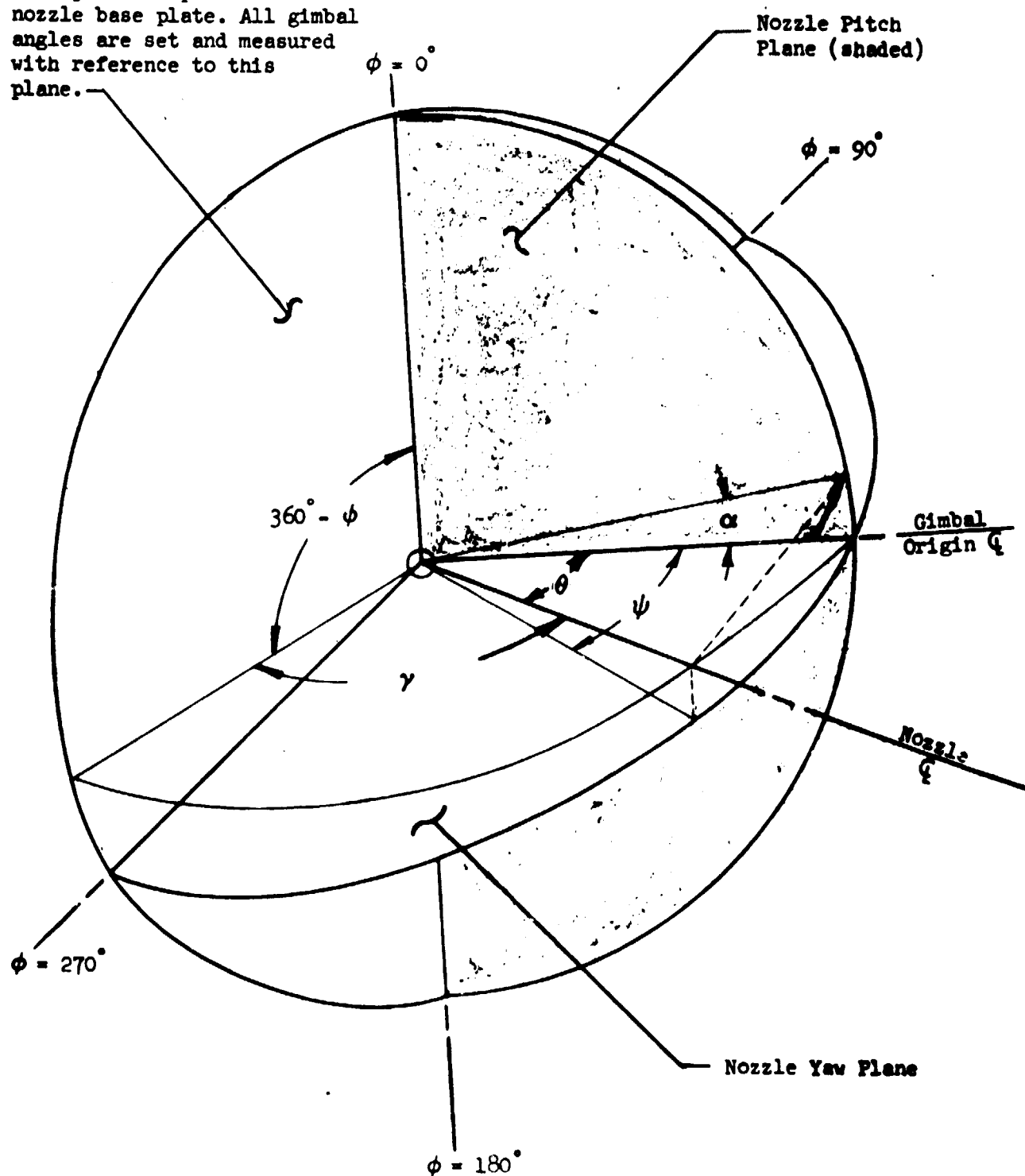


Figure 1f. Nozzle Gimbal Angle Defined

a. ASCENT VEHICLE CONFIGURATION

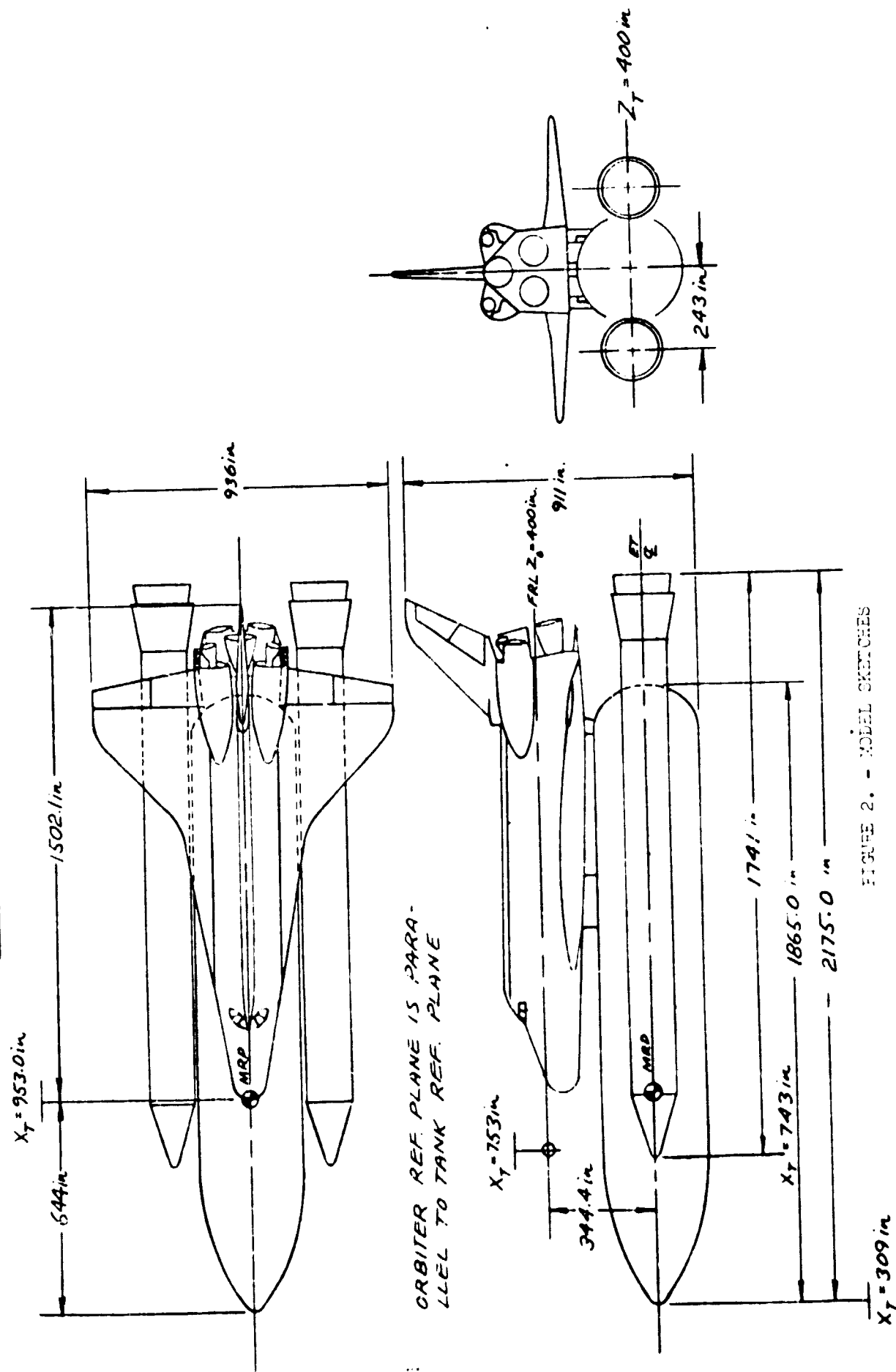
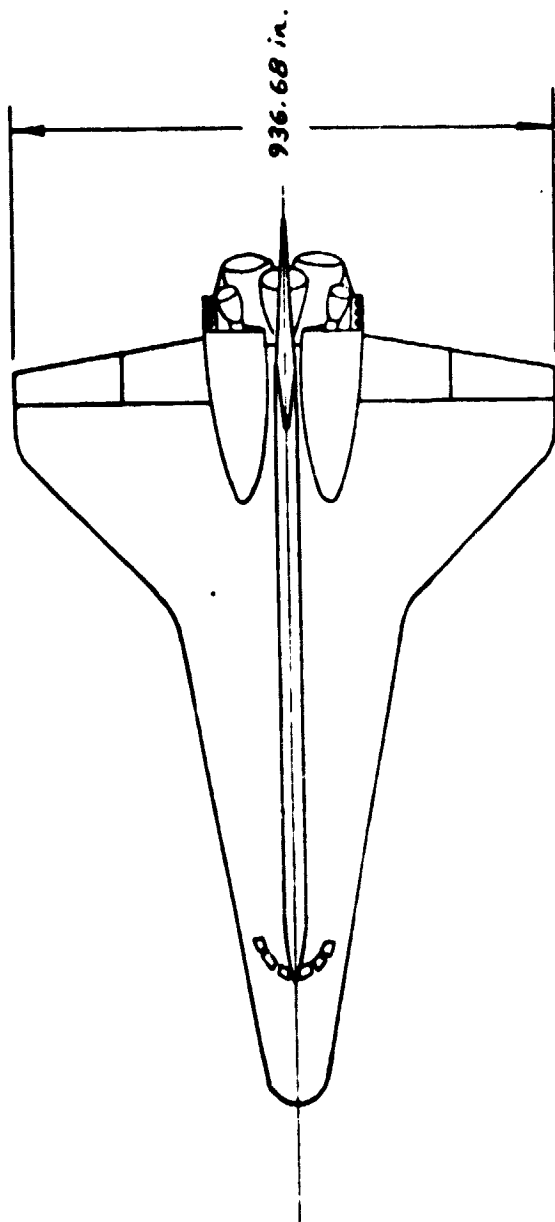


FIGURE 2. - MODEL SKETCHES



79

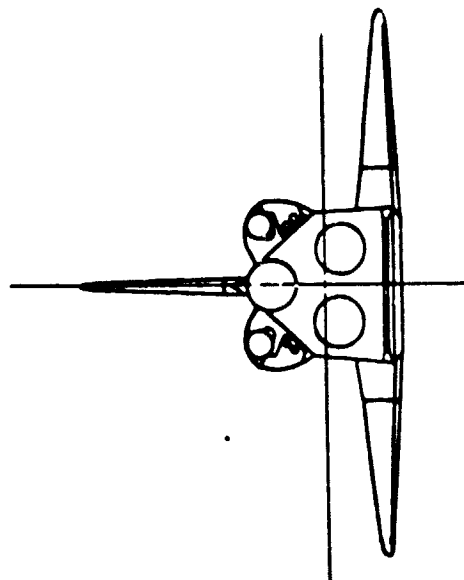
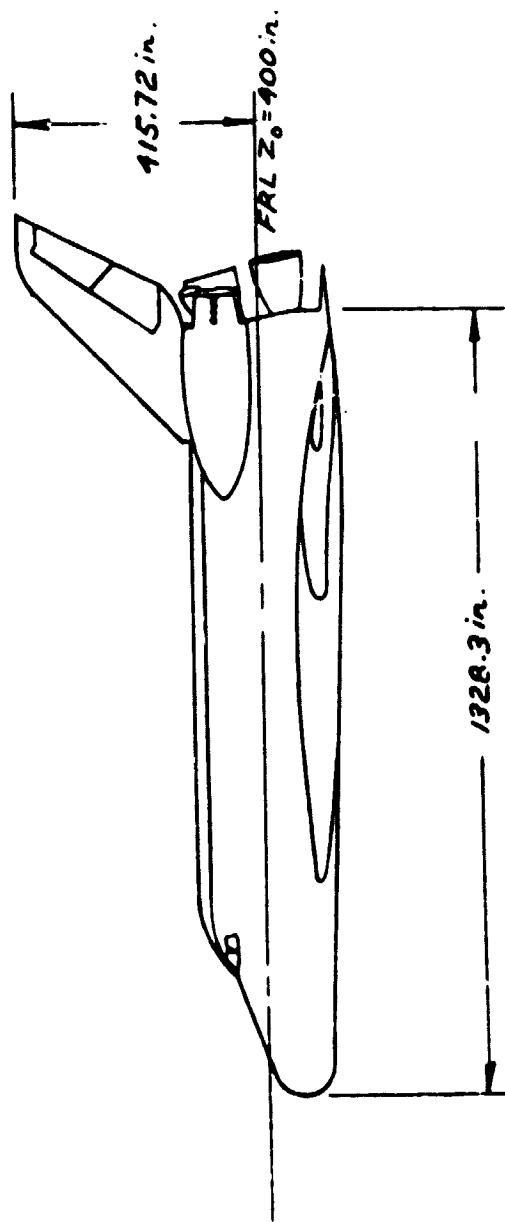
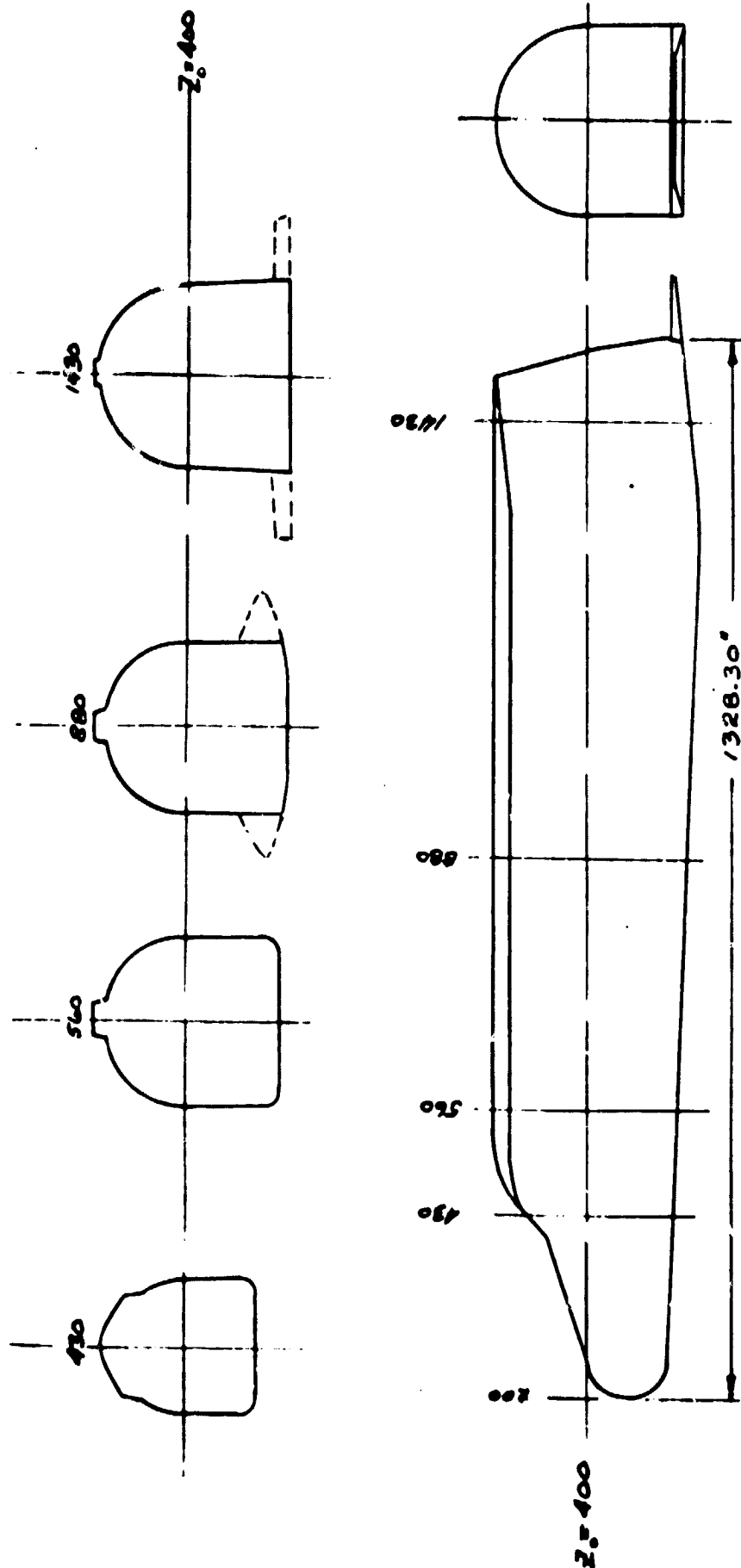


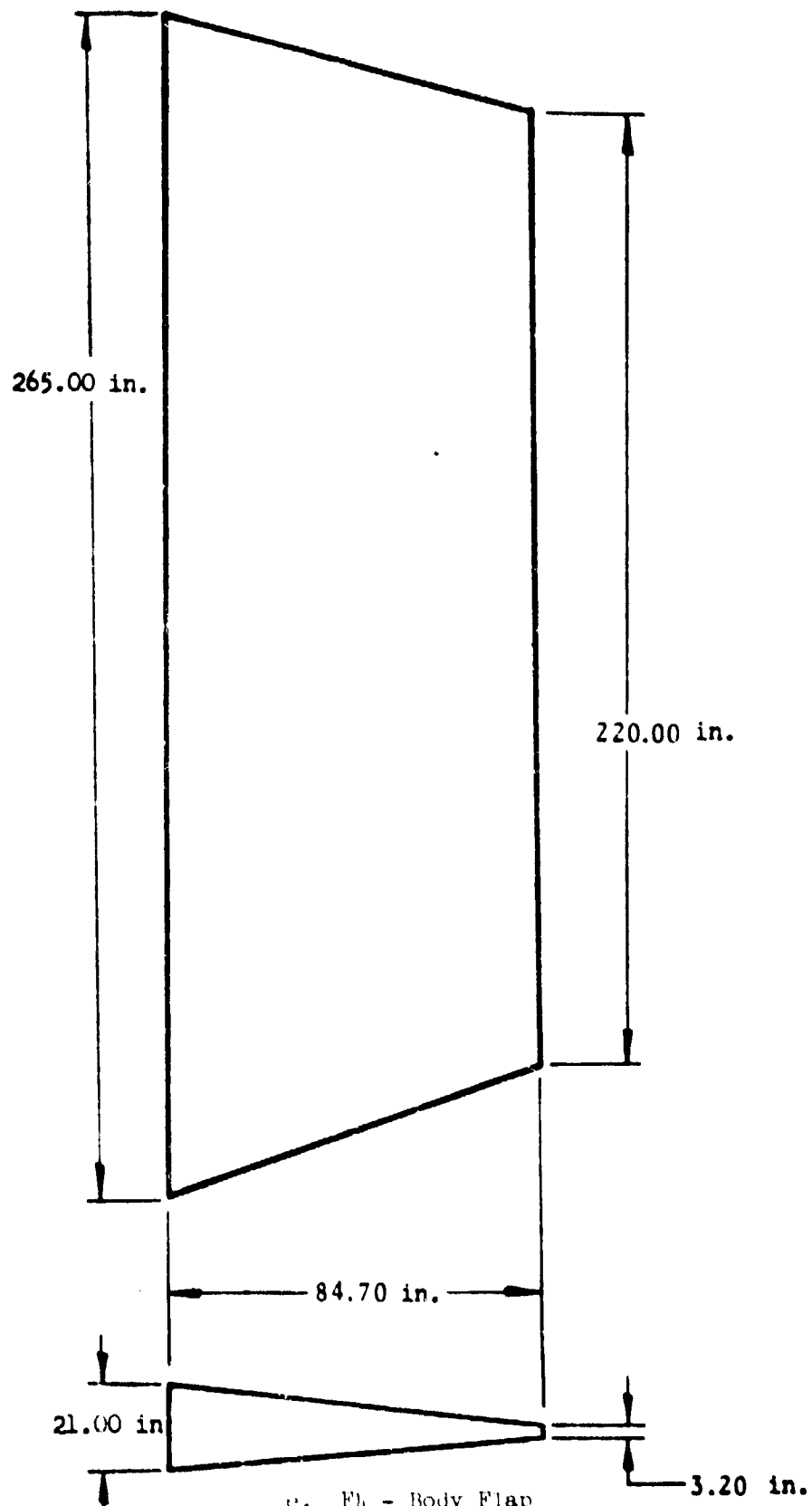
Figure 2 - Continued.

b. 2A ORBITER CONFIGURATIONS, O₁ AND O₂

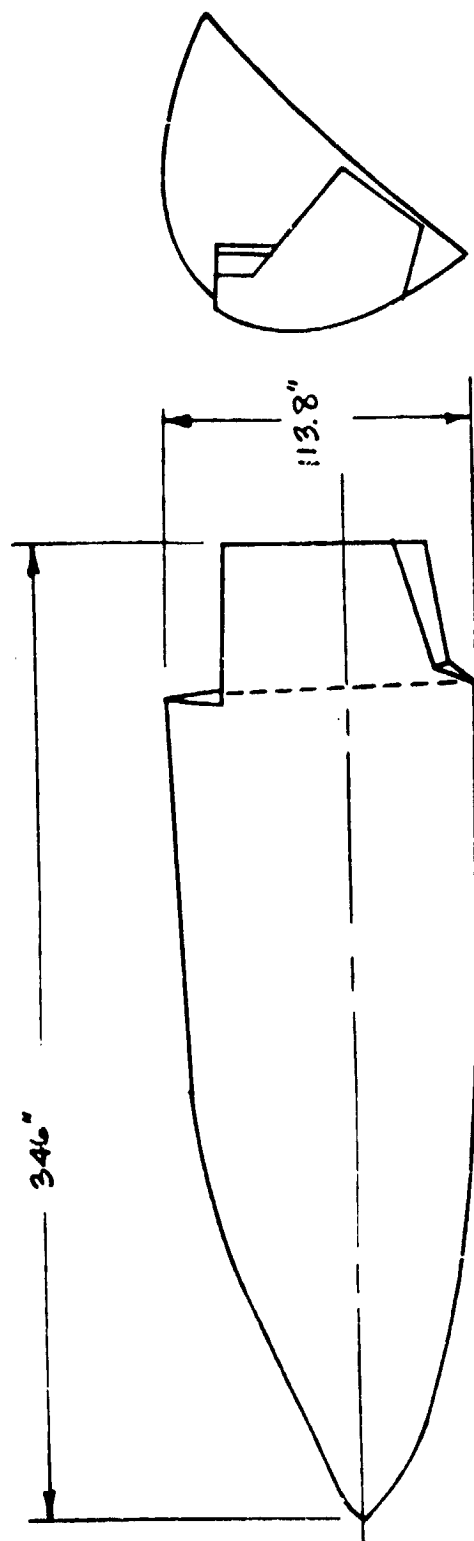


c. BASIC 2A FUSELAGE WITH BODY FLAP, B₁₀

Figure 2 - Continued.

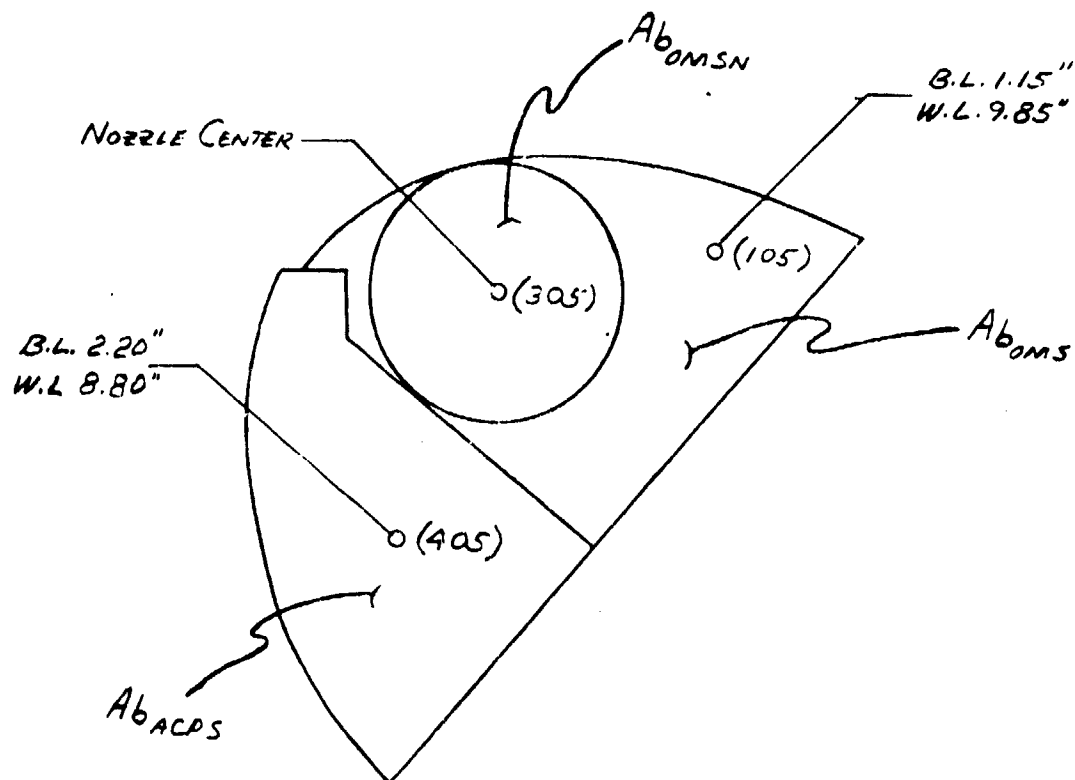


c. Fl - Body Flap
Figure 2. - Continued.



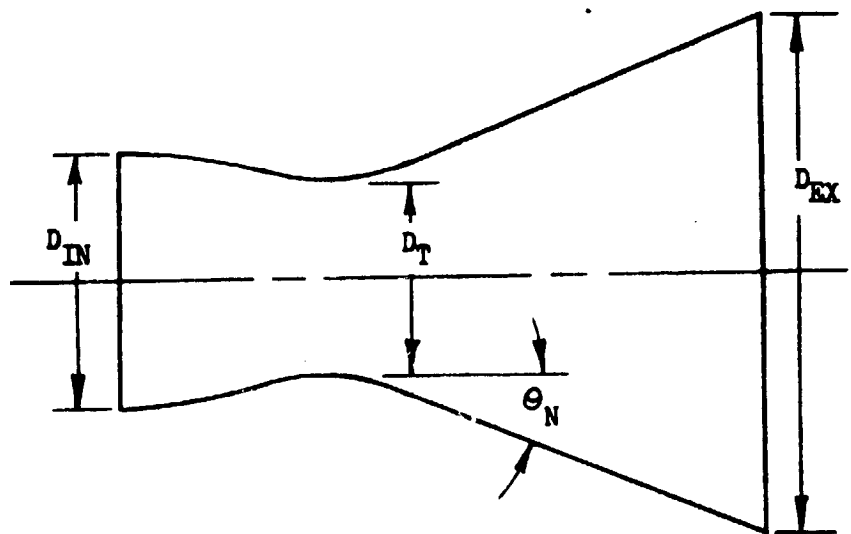
f. OMS POD CONFIGURATION, M3

Figure 2. - Continued.



8. OMS POD BASE
STATIC PRESSURE TAP LOCATIONS

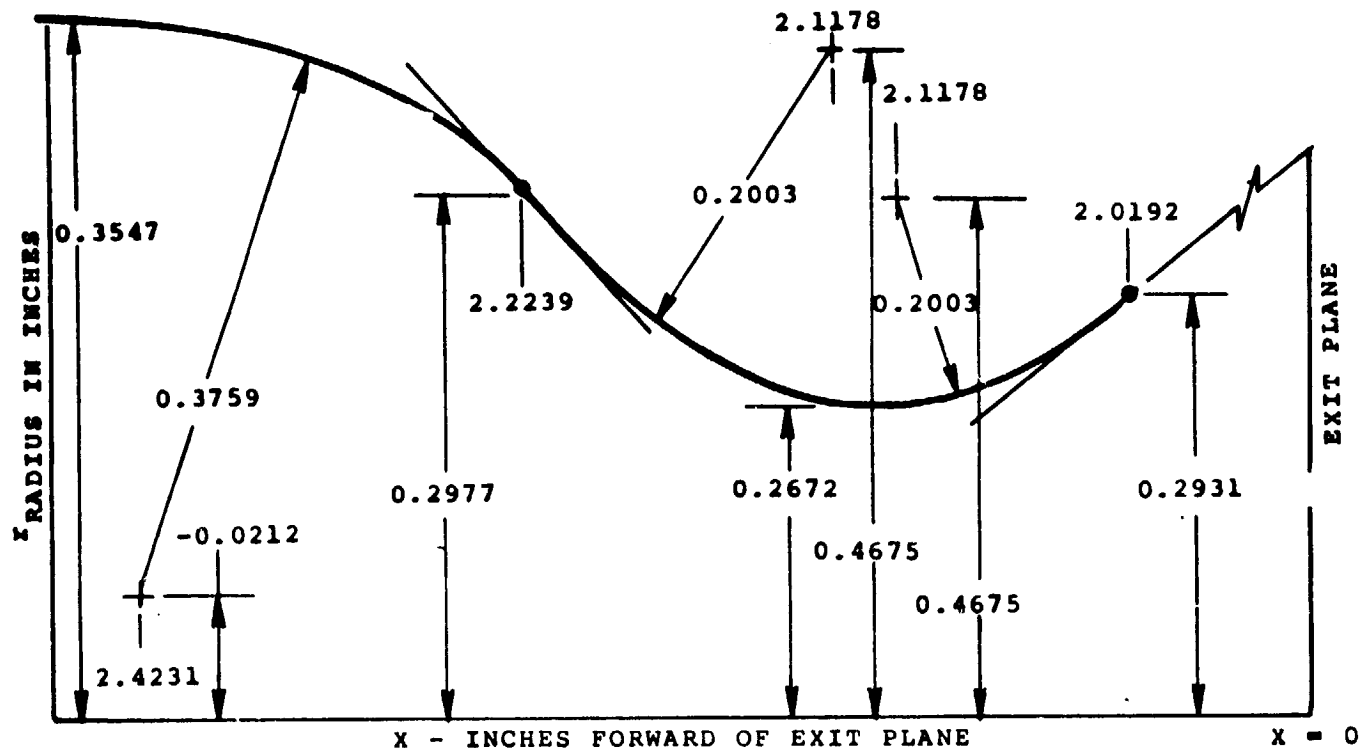
Figure 2. - Continued.



n. BASIC NOZZLE DIMENSIONS

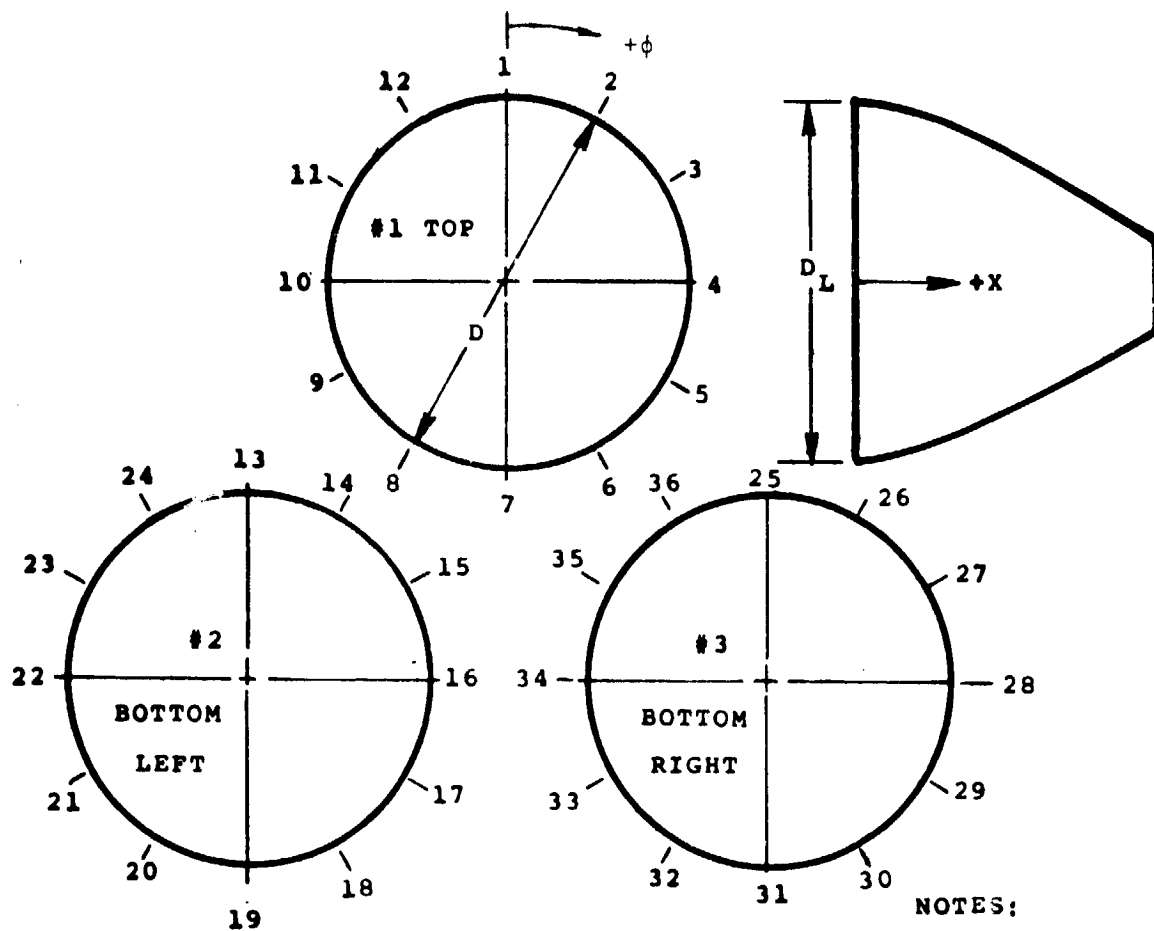
Figure 2. - Continued.

NOTE: SKETCH DIMENSIONS ARE INCHES
MODEL SCALE



X/r^*	r/r^*	X/r^*	r/r^*
0	3.2257 (EXIT PLANE)	3.6999	2.5393
0.1097	3.2107	3.9169	2.4828
0.3365	3.1793	4.0378	2.4525
0.5879	3.1430	4.1718	2.4165
0.8660	3.1010	4.3215	2.3754
1.0101	3.0786	4.4862	2.3286
1.3342	3.0258	4.6980	2.2665
1.6437	2.9727	4.8990	2.2055
1.8428	2.9368	5.0303	2.1639
2.0992	2.8892	5.1969	2.1104
2.2421	2.8615	5.3945	2.0442
2.4012	2.8301	5.6396	1.9585
2.5782	2.7942	5.7848	1.9053
2.7743	2.7530	5.9188	1.8552
2.9918	2.7058	6.1246	1.7754
3.1995	2.6591	6.3593	1.6796
3.4008	2.6123	6.5565	1.5954
3.5307	2.5808	6.7013	1.5307
		6.9143	1.4215
		7.1815	1.7665
		7.2455	1.2665
		7.4502	1.1568
		7.5569	1.0969

Figure 2. (Cont'd)
1. Nozzles N_9 and N_{10}



NOTES:

• $D_{AVG} = 71.0"$

θ (DEG)	X/D	TAP NO.	D_L/D_{AVG}
0	.058	1,13,25	1.2817
30	.928	2,14,26	.6789
60	.753	3,15,27	.8592
90	.580	4,16,28	1.0141
120	.406	5,17,29	1.1479
150	.232	6,18,30	1.2324
180	.058	7,19,31	1.2817
210	.928	8,20,32	.6789
240	.753	9,21,33	.8592
270	.580	10,22,34	1.0141
300	.406	11,23,35	1.1479
330	.232	12,24,36	1.2324

J. Orbiter Nozzle, N10, Pressure Orifice Locations
Figure 2. - Continued.

NOTE: ● DIMENSIONS FOR MODEL SRM
NOZZLE TO SIMULATE $M = 3.0$,
3.5 CONDITIONS
SCALE: 0.019

● ALL DIMENSIONS IN INCHES

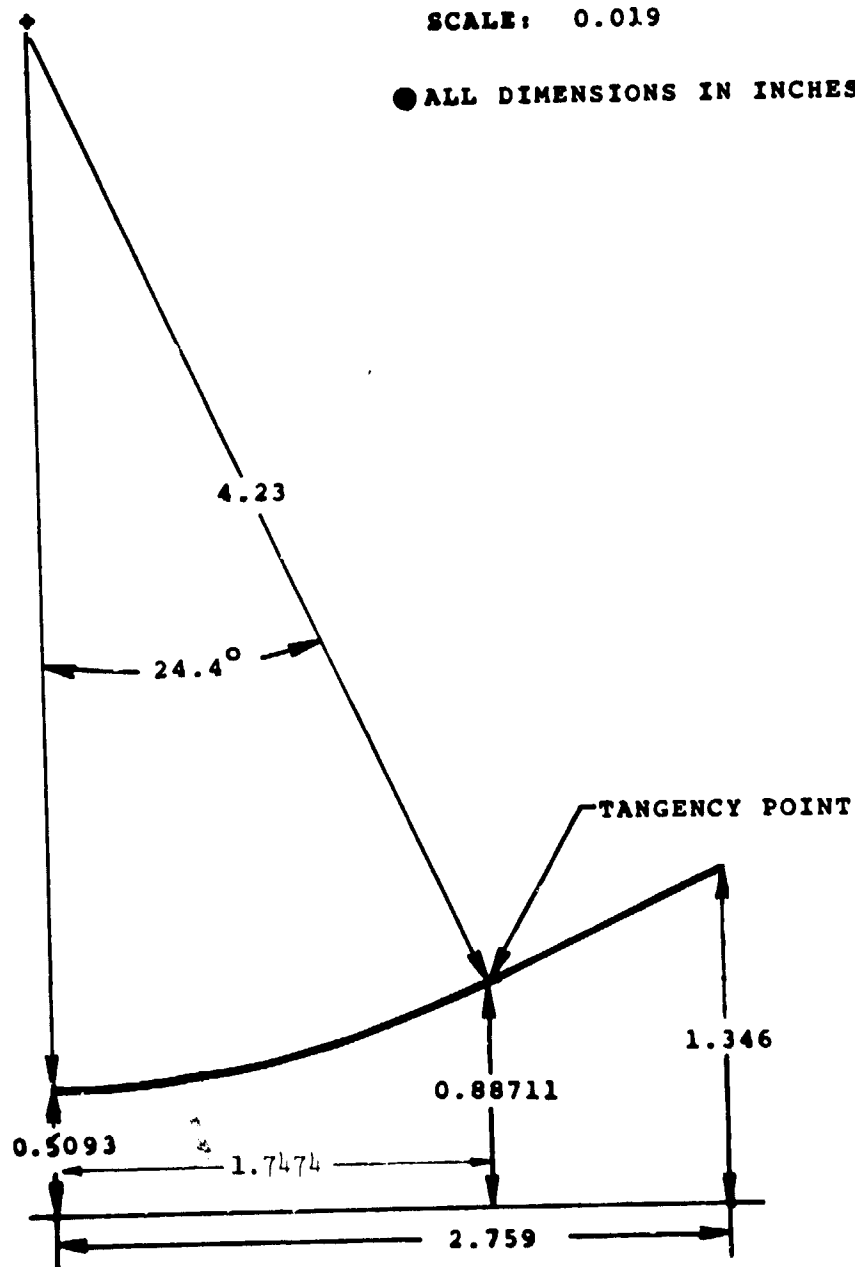


Figure 2. (Cont'd)
k. Nozzle, N_{18} , Internal Contour

COORDINATES		GEOMETRY DESCRIPTION
AXIAL x/R_t	RADIAL R/R_t	
0.0	1.000	THROAT PLANE
0.04689	1.00184	CIRCULAR ARC SECTION
0.11719	1.01155	
0.16409	1.02286	
0.21098	1.03832	
0.23443	1.04766	CONICAL SECTION
0.54862	1.18106	CONICAL SECTION
0.80001	1.28777	CONICAL SECTION
0.86284	1.31443	CONTOURED SECTION
1.13502	1.42312	
1.50148	1.57291	
1.93249	1.73122	
2.29137	1.85372	
2.67702	1.97678	
3.08772	2.09868	
3.52342	2.21816	
3.98088	2.33472	
4.45984	2.44695	
4.79089	2.51908	
5.13099	2.58921	
5.42124	2.64578	
		CONTOURED SECTION
		EXIT PLANE

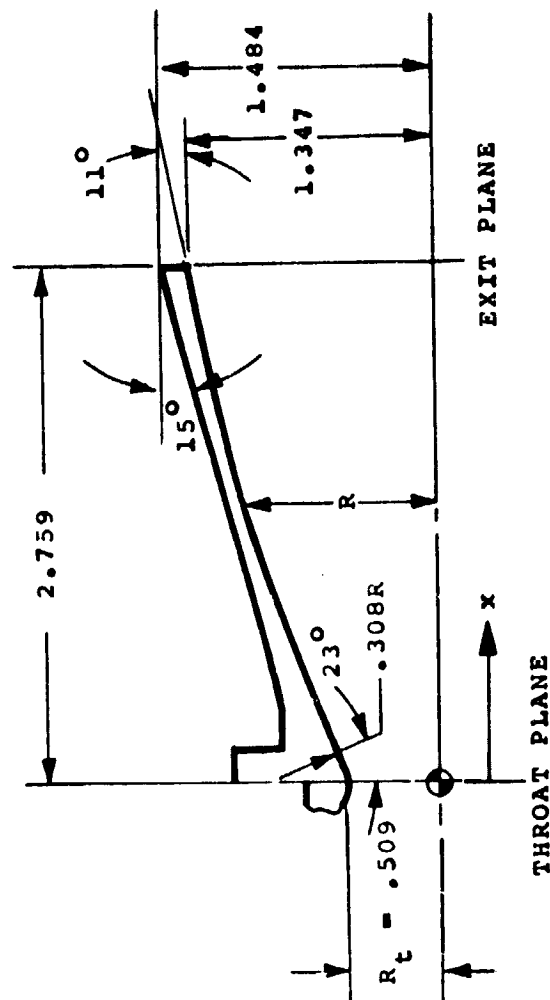
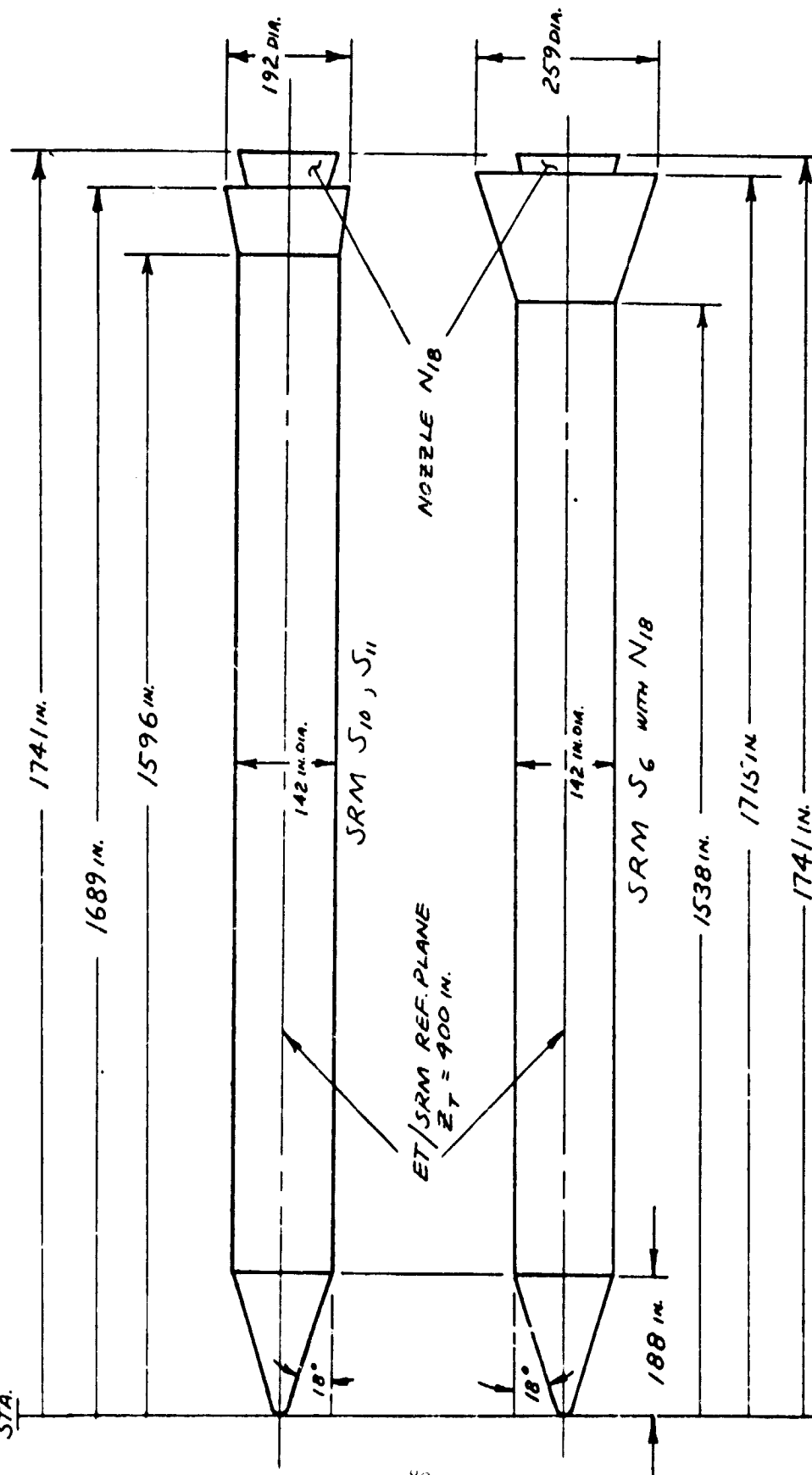


Figure 2 (Cont'd)
 0. Nozzle, N₁₇, Internal Contour

$X_T = 672 \text{ in.}$ (S_{11})
 $X_T = 743 \text{ in.}$ (S_{10})
 $X_S = 200 \text{ in.}$

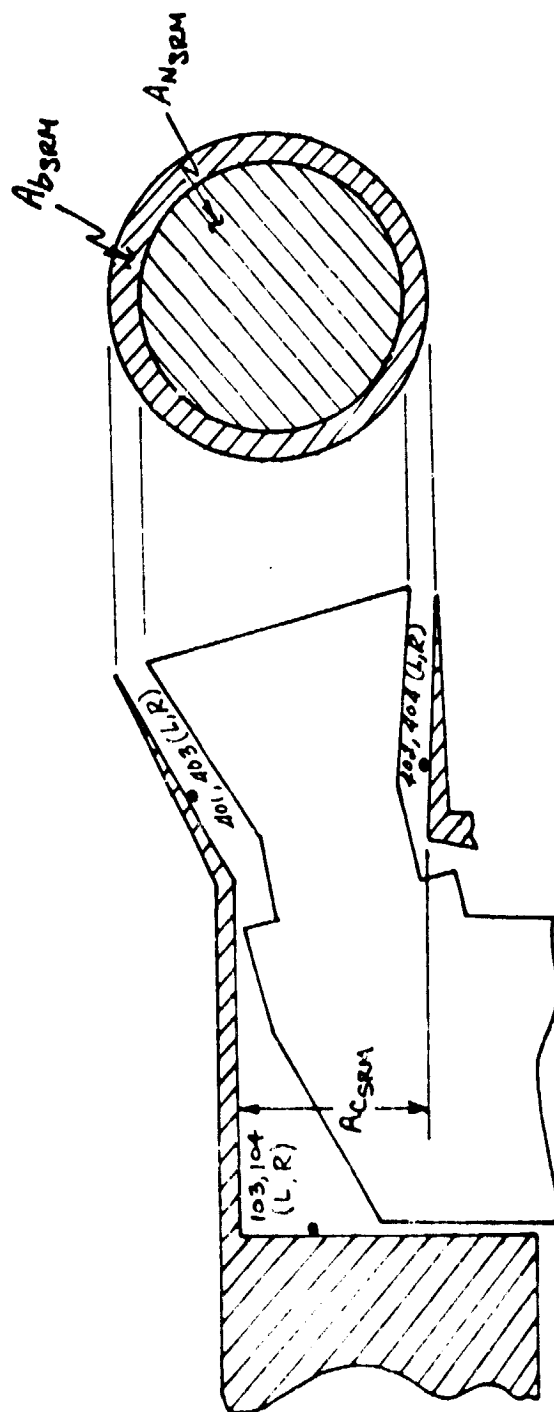
STA.



STA.
 $X_S = 200 \text{ in.}$
 $X_T = 743 \text{ in.}$

2. SOLID ROCKET MOTOR CONFIGURATIONS

Figure 2. - Continued.



n. SRM Pressure Top Locations

Figure 2. - Continued.

c. EXTERNAL TANK
 T_{10}

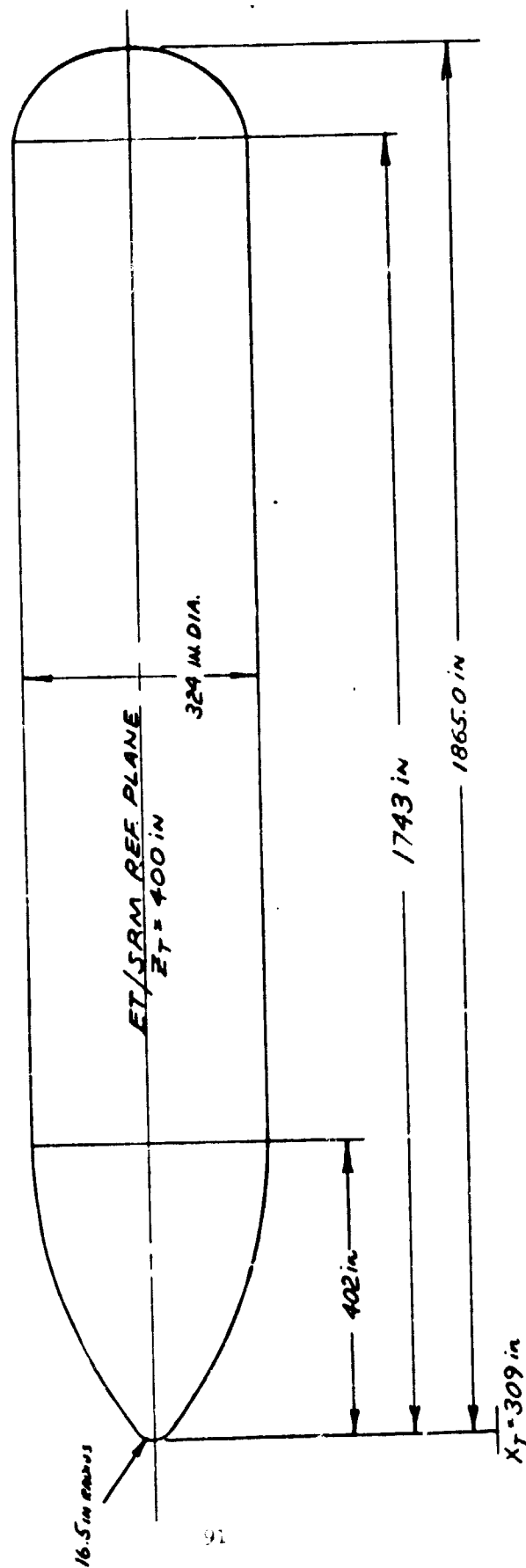
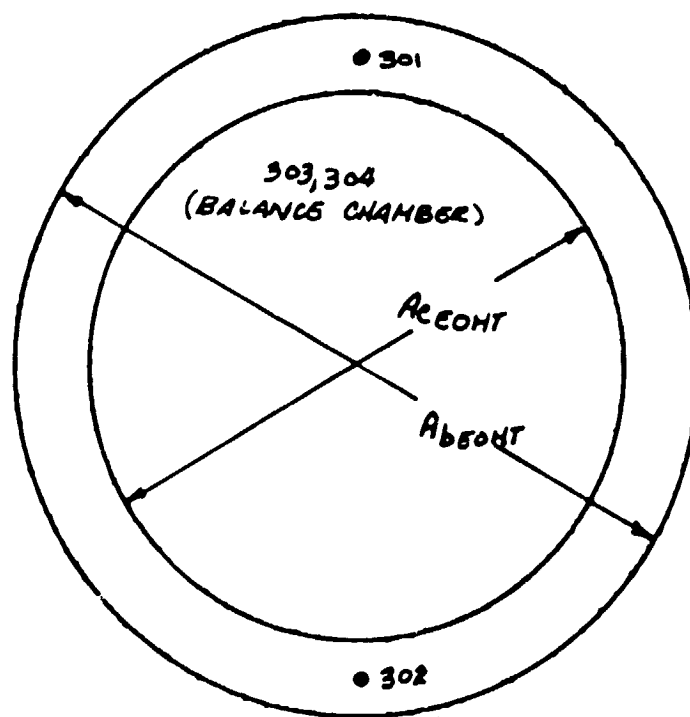
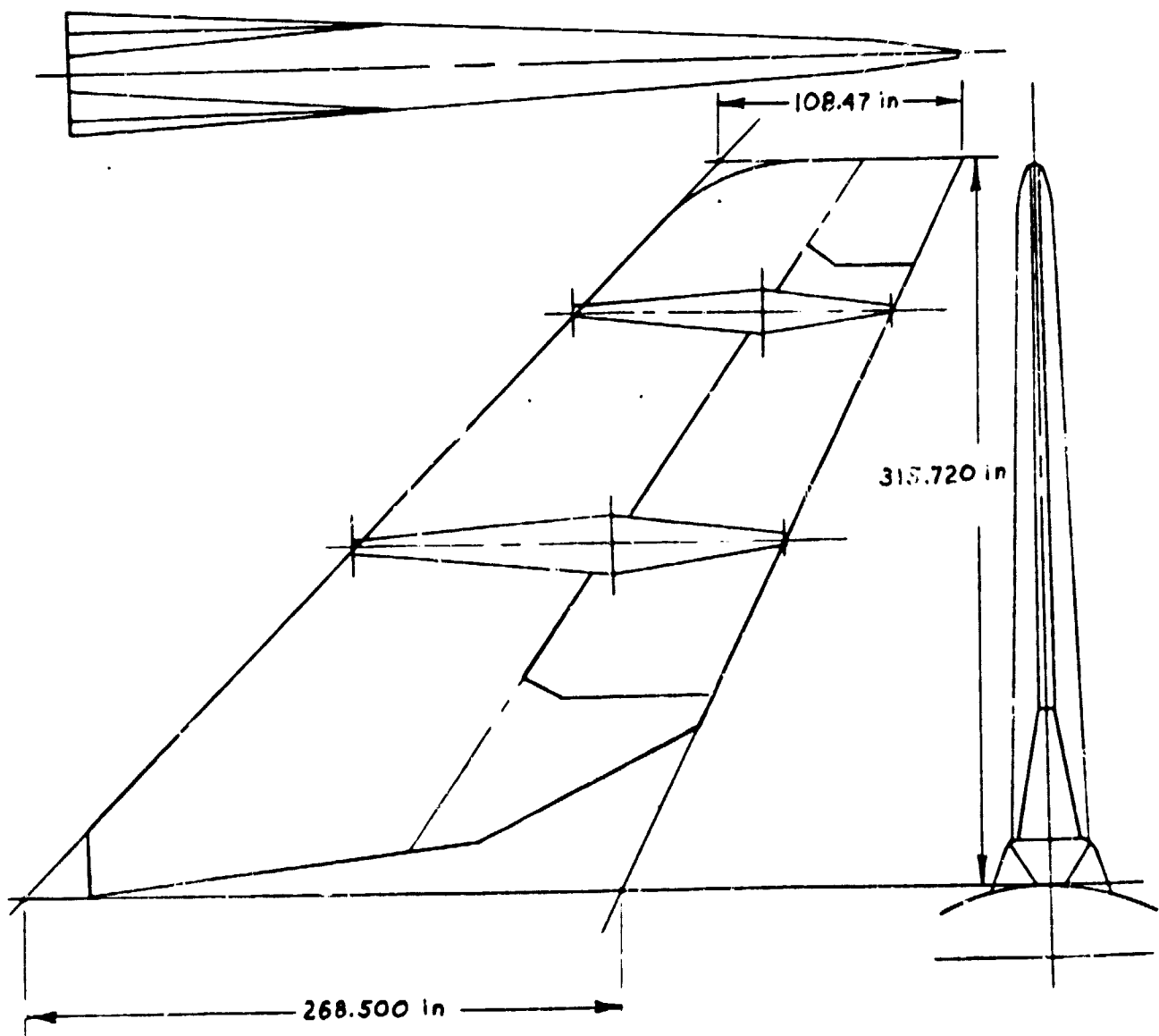


Figure 2. - Continued.



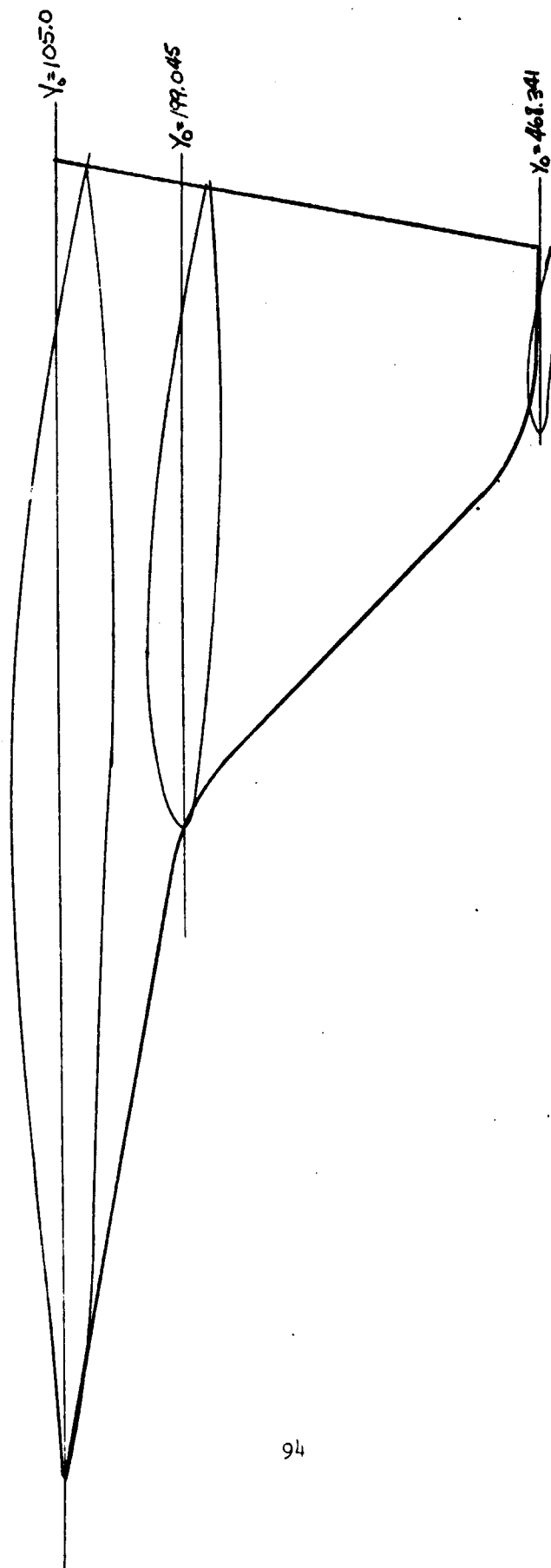
EOHT Pressure Tap Locations

Figure 7. - Continued.



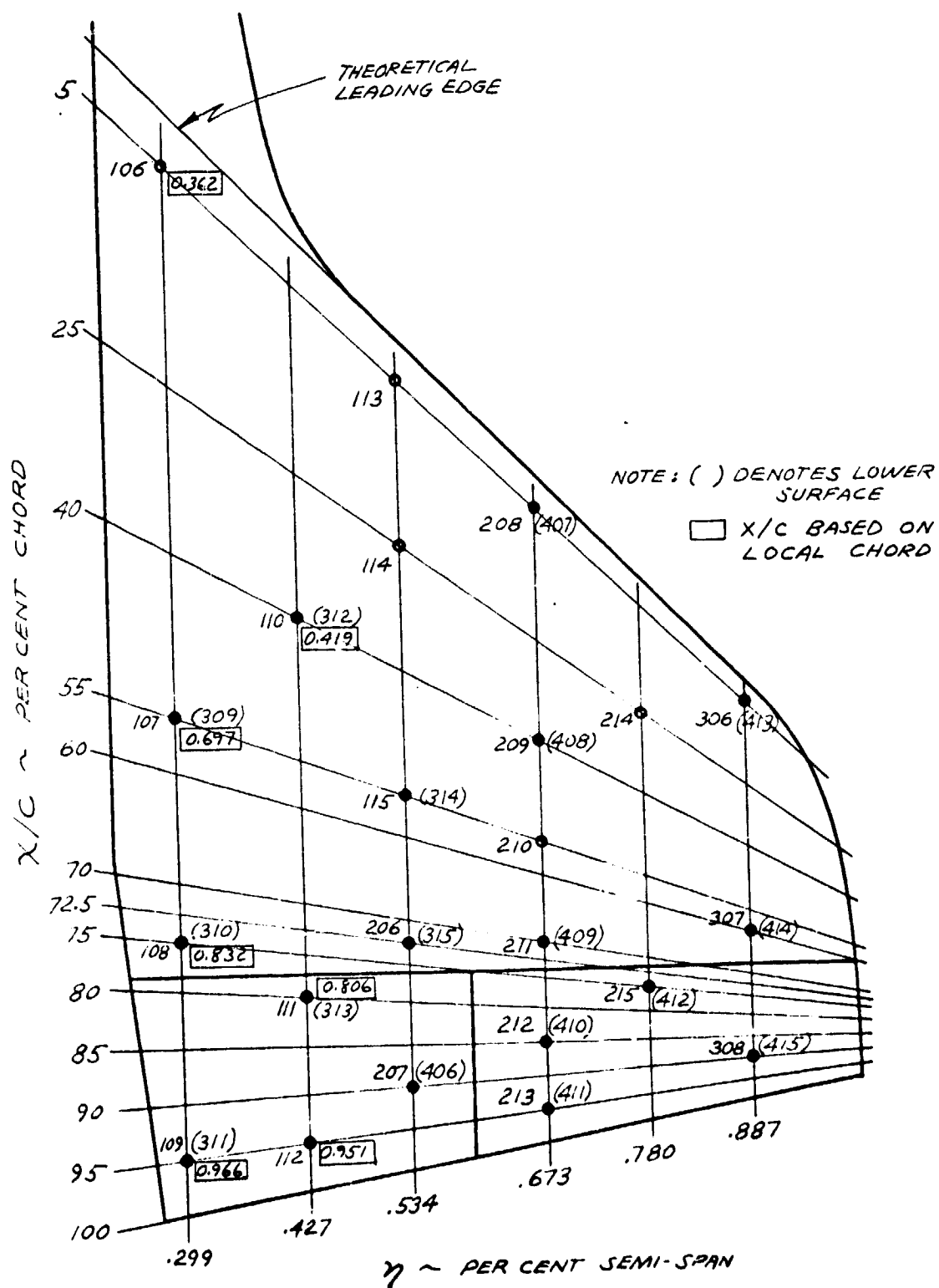
4. VERTICAL TAIL, V₅

Figure 2. - Continued.



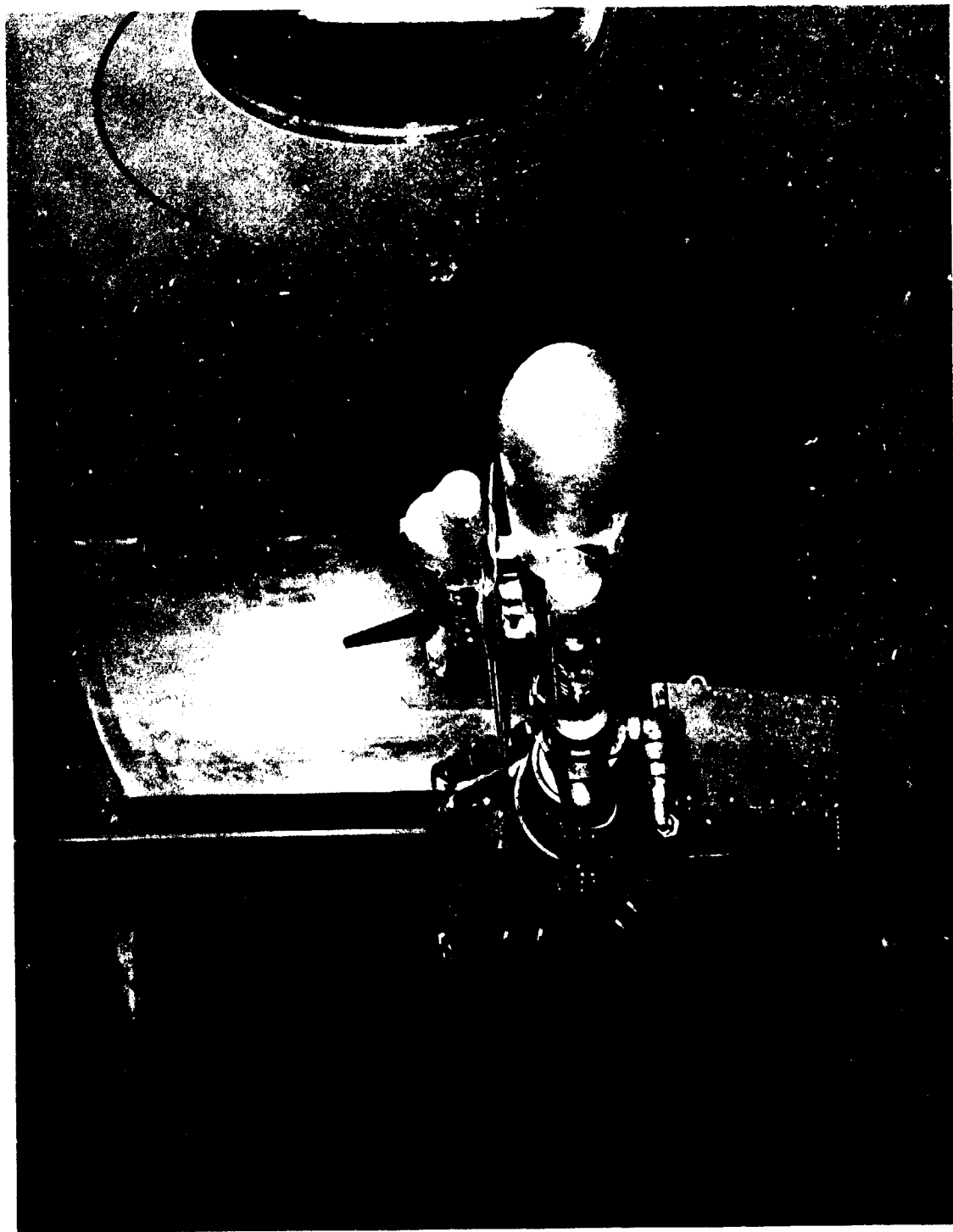
r. BASIC 2A WING CONFIGURATION, W87

Figure 2. - Continued.



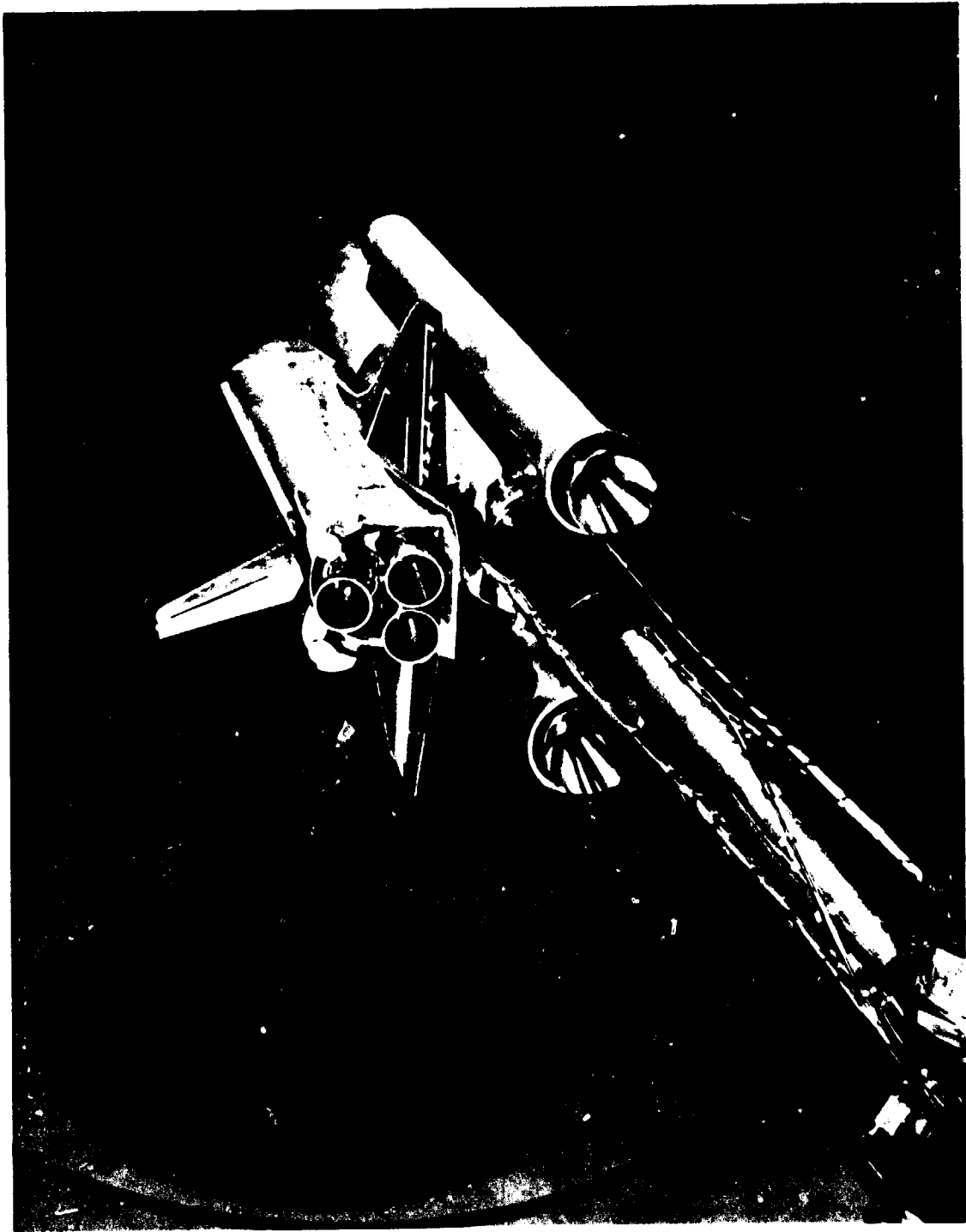
s. Wing Pressure Tap Locations for Righthand Wing Panel

Figure 2. - Concluded.



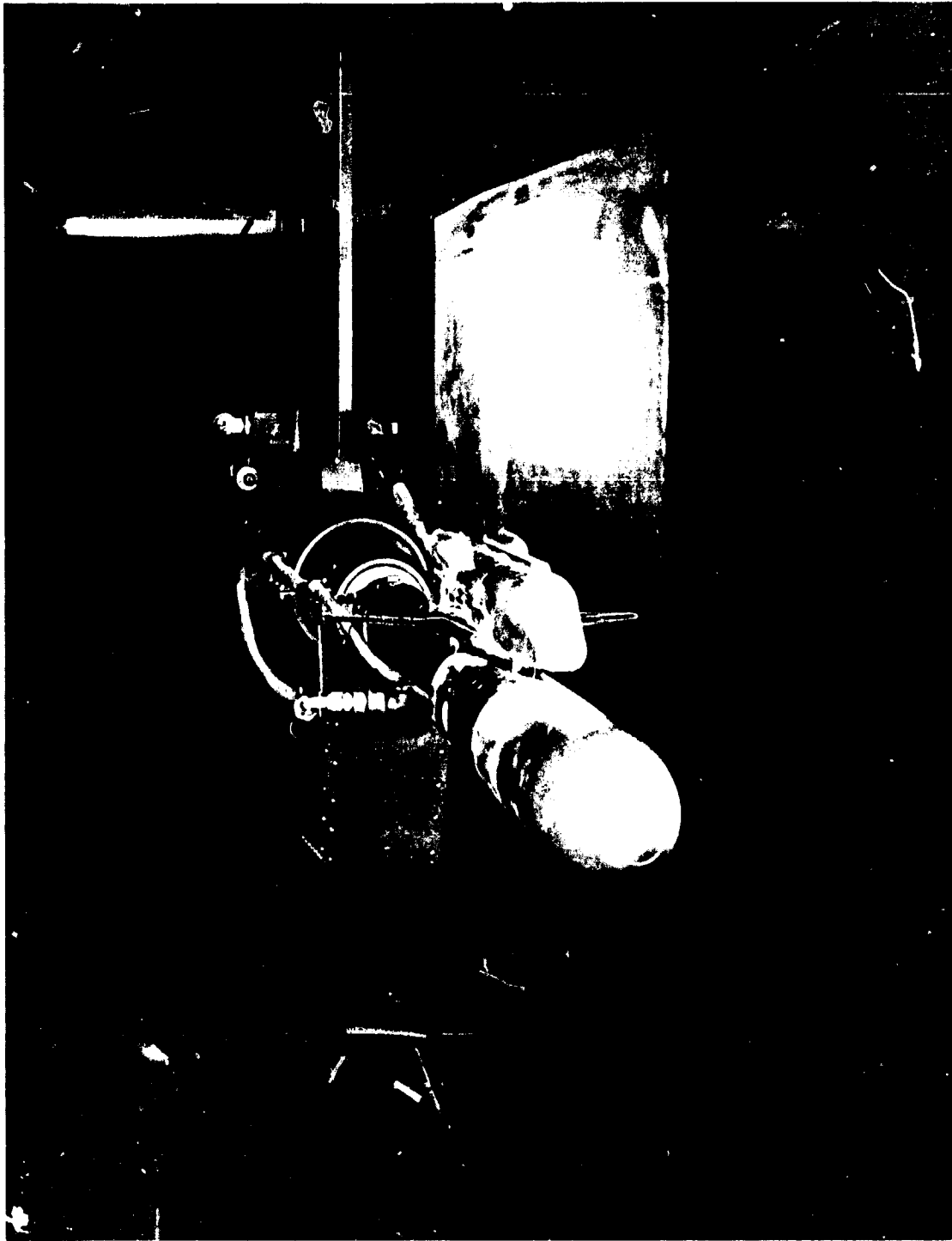
(a) Front view of launch vehicle with high pressure plumbing

Figure 3. - Model installation photographs.



(b) Aft view of launch vehicle

Figure 3. - Continued.



(c) Front view of second stage (SRB's off)
Figure 3. - Continued.



(d) Aft view of second stage (SPB's off)

Figure 3. - Concluded.

DATA FIGURES

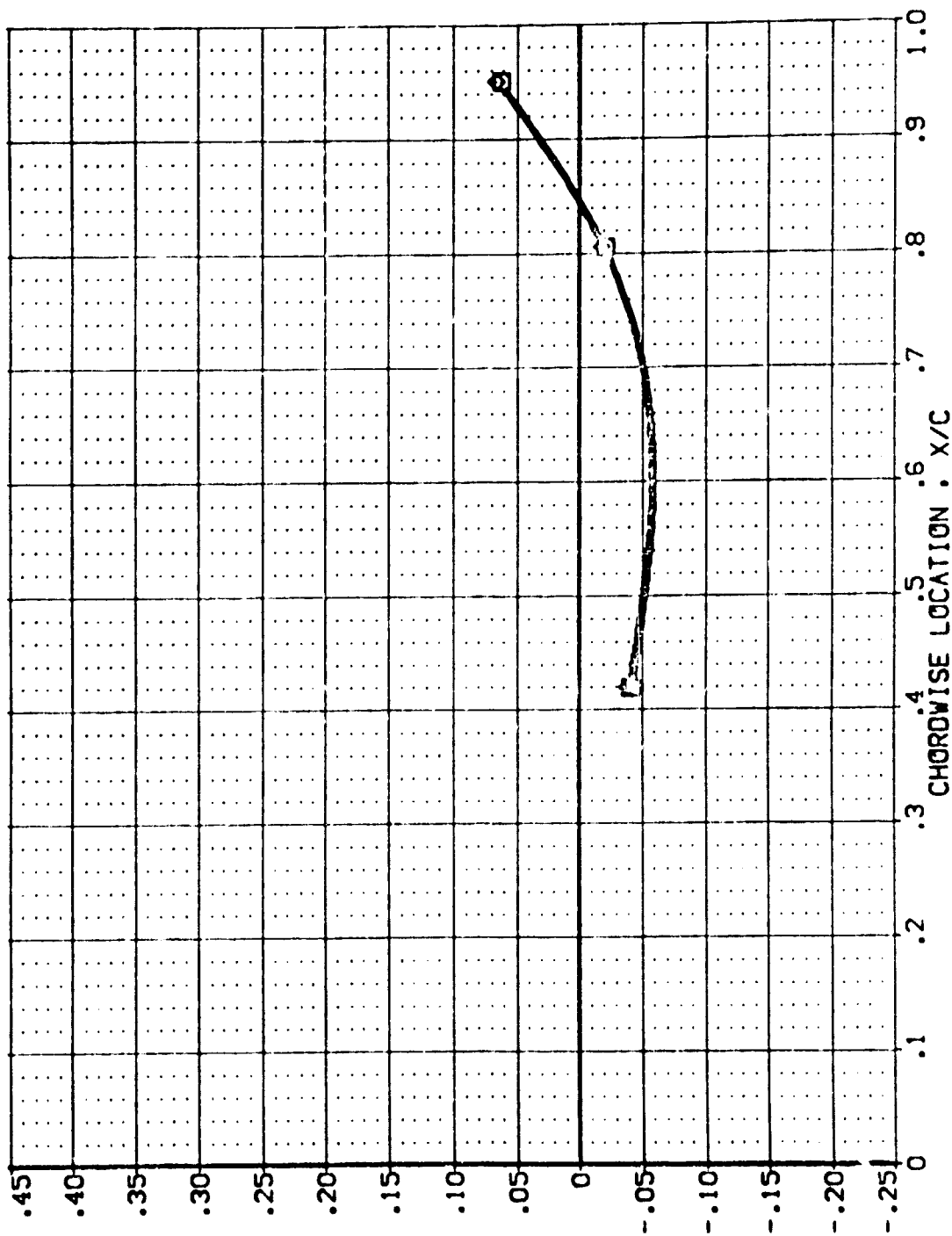
Wing Pressure Data
(For Force Data - See Volume I)

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/F S/FPR 01MVAL

(UB2007) ASES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 14.720 .429 1.000

(UB2005) ASES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE 1.000 31.260 .916 1.000

(UB2004) ASES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE 1.000 31.260 .916 1.000



PRESSURE COEFFICIENT, CP

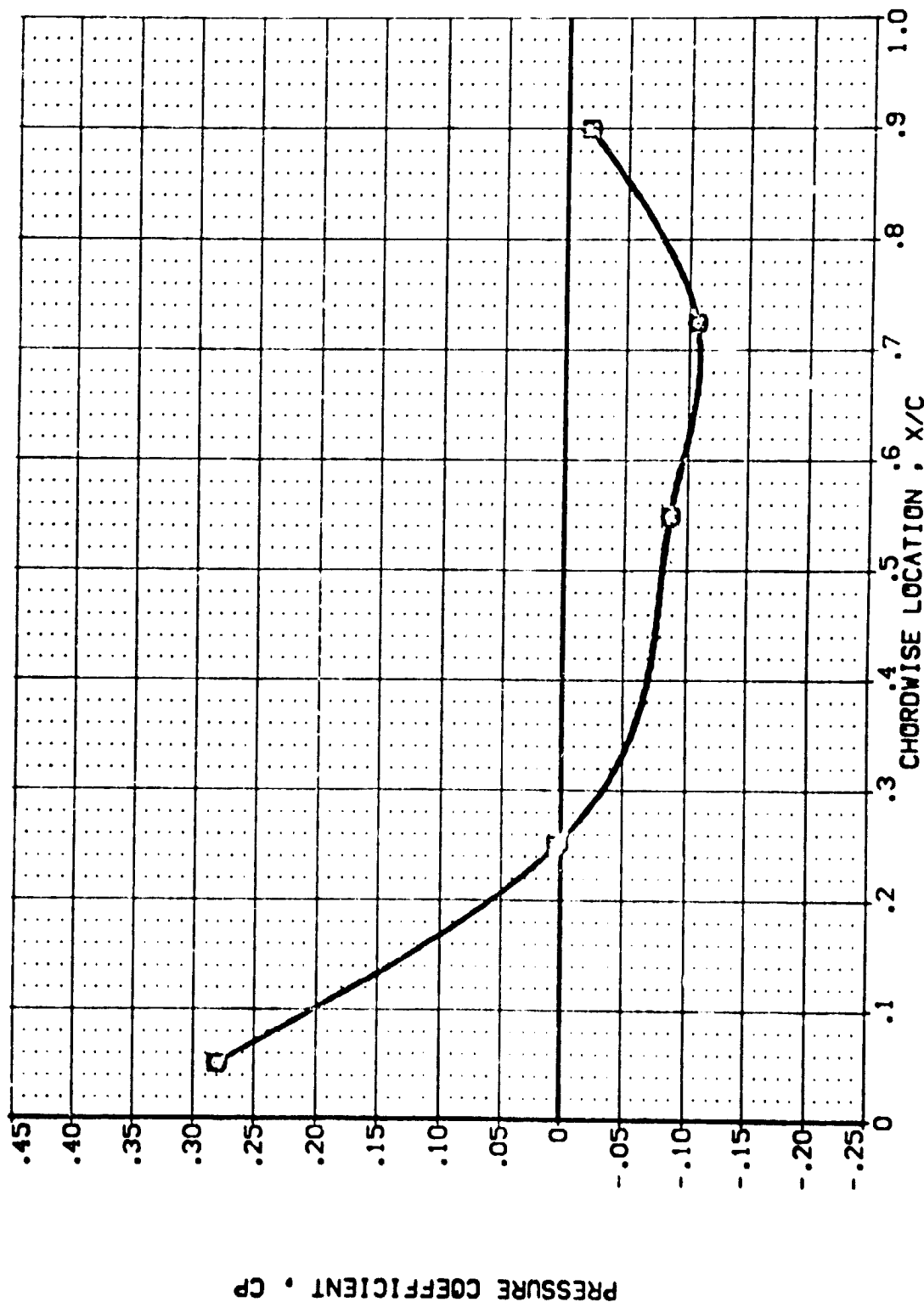
PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL
(UB20037)
(UB20038)
(UB20039)

CONFIGURATION DESCRIPTION
AVES 87-710 IAL2C 01 T1 S1
AVES 87-710 IAL2C 01 T1 S1
AVES 87-710 IAL2C 01 T1 S1

POWER DFR ST-PR GIMBAL
.000 14.720 1.000
1.000 31.260 .429 1.000

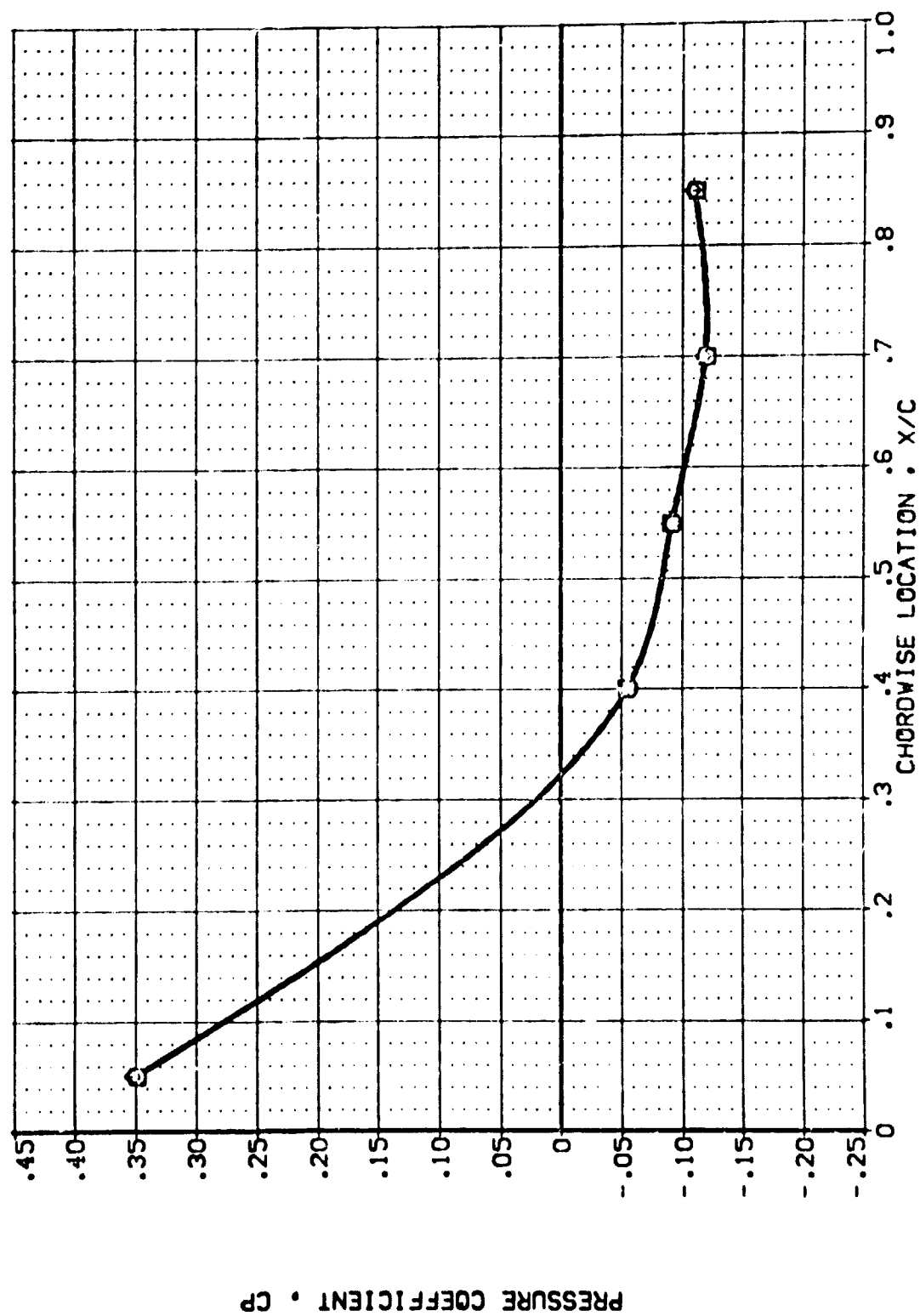


PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZ007) Q AHES 87-710 [A]2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ005) S AHES 87-710 [A]2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ034) S AHES 87-710 [A]2C 01 T1 S1 UPPER WING PRESSURE

POWER GPR SGRPR GIMBAL
 .000 14.720 .429 1.000
 1.000 31.260 .916 1.000

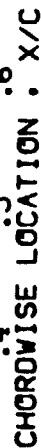


PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .673

CONFIGURATION	DESCRIPTION
ES 87-710	IAIZC 01 TI SI
ES 87-710	IAIZC 01 TI SI
ES 87-710	IAIZC 01 TI SI

POWER	CTR	SEPR	GIMBAL
1,000			1,000
1,000	14.720	.429	1,000
1,000	31.260	.916	1,000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2037)
(UB2038)
(UB2039)

AKES 87-710
AKES 87-710
AKES 87-710

AI2C 01 T1 S1
AI2C 01 T1 S1
AI2C 01 T1 S1

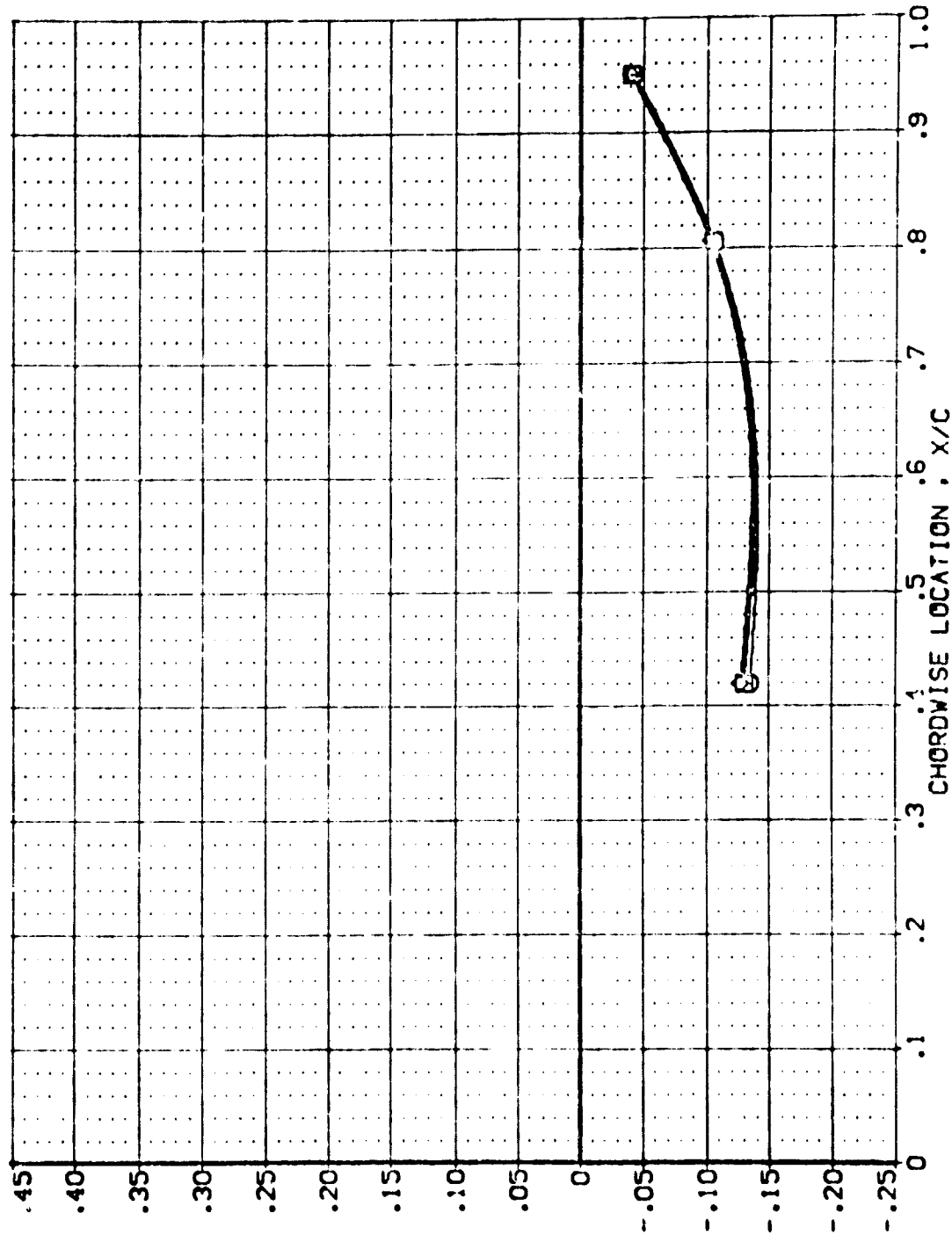
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER
1.000
1.000
1.000

SRPR
.429
.916

OPR
14.720
31.260

CIMBAL
1.000
1.000
1.000



PRESSURE COEFFICIENT, CP

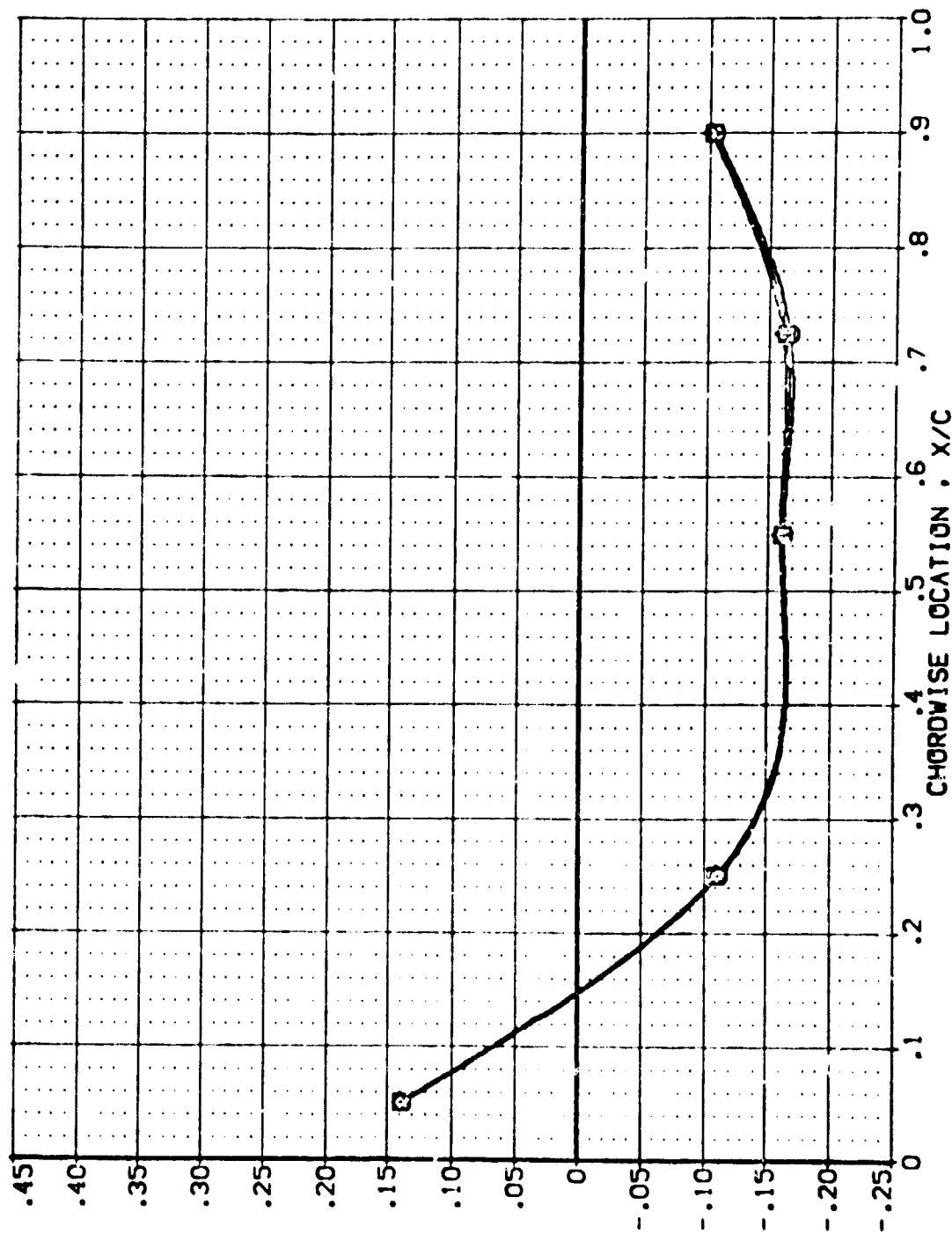
PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .427

DATA SET SYMBOL
(UB2007)
(UB2008)
(UB2009)

CONFIGURATION DESCRIPTION
AVES 87-710 IAI2C 01 T1 S1
AVES 87-710 IAI2C 01 T1 S1
AVES 87-710 IAI2C 01 T1 S1

POWER C/P S/CPR GIMBAL
1.000
1.000
1.000
14.720
31.260
4.23
9.16



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

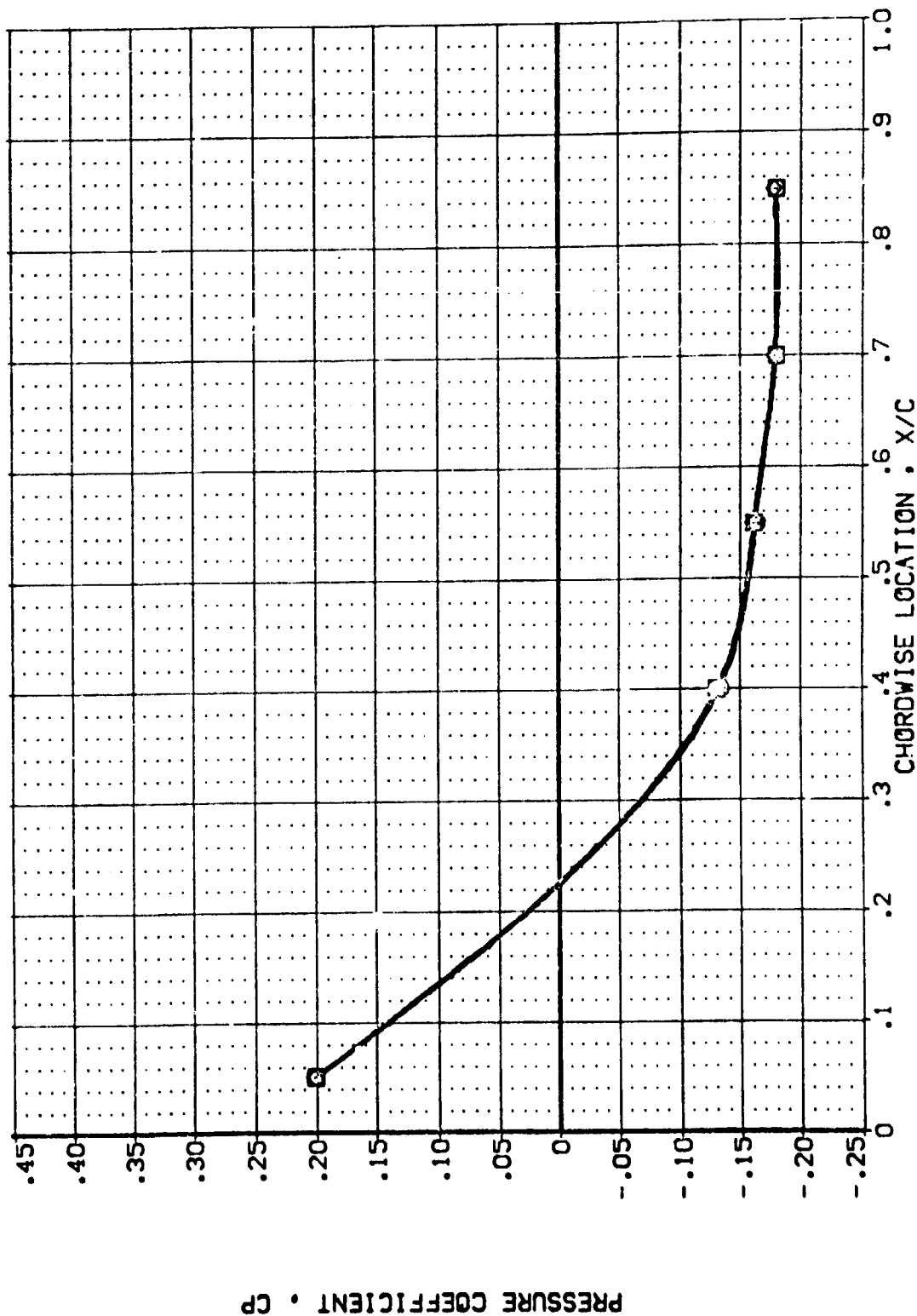
MACH = 2.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER DFR SFR GIBAL

(UBZ037) AHES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 14.720 .429 1.000

(UBZ035) AHES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE 1.000 31.260 .916 1.000

(UBZ034) AHES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE 1.000 31.260 .916 1.000

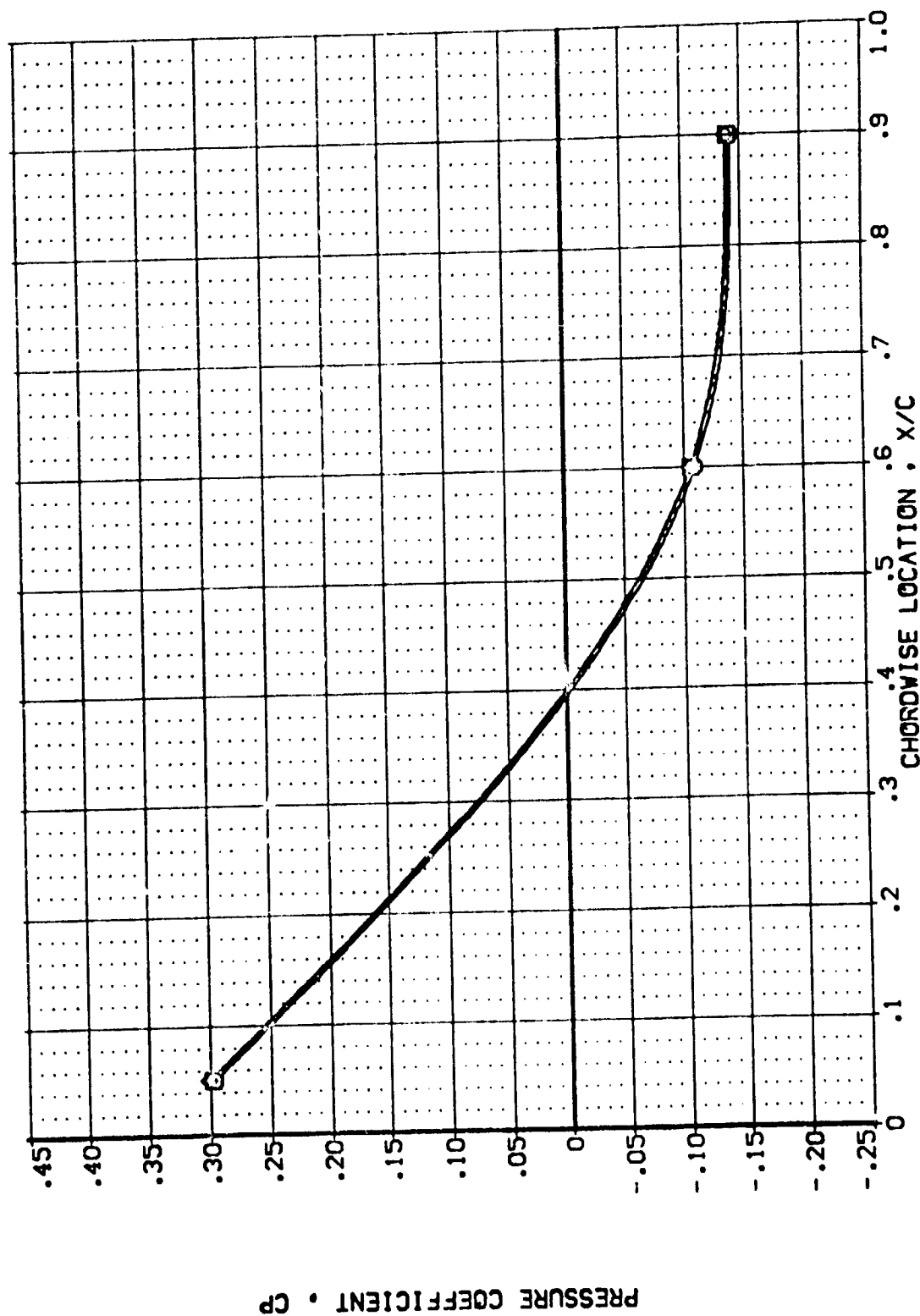


PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UB7037) ASES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE
 (UB7038) ASES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE
 (UB7039) ASES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE

POWER DPR SDRP GINBAL
 .000 14.720 .429 1.000
 1.000 31.260 .916 1.000



PRESSURE COEFFICIENT, CP

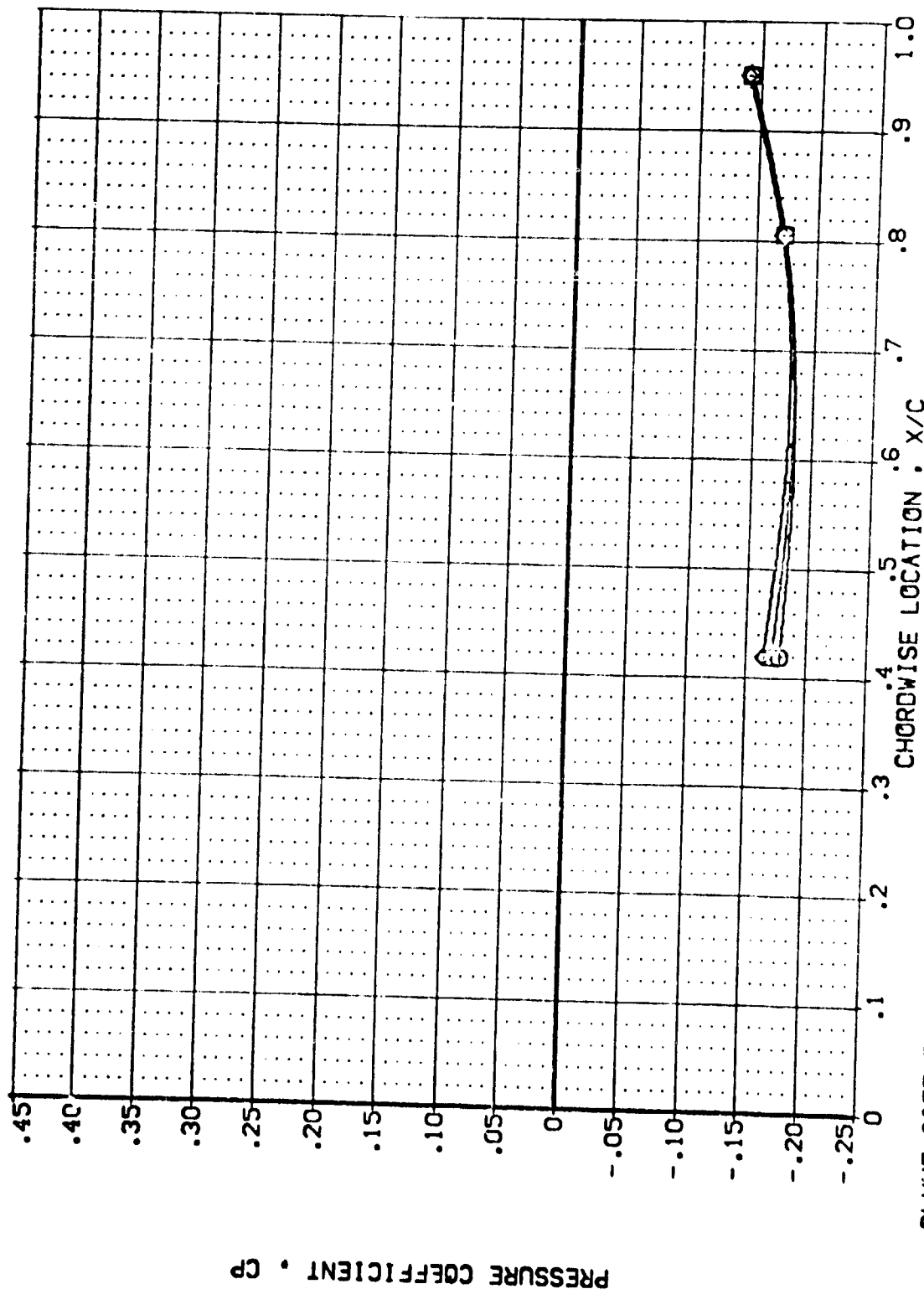
PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .887

(U87037)
(U87035)
(U87034)

TEST LOCATION		DESCRIPTION	
AMES 07-710	1A12C 01 T1 S1	UPPER	VING PRESSURE
AMES 07-710	1A12C 01 T1 S1	UPPER	VING PRESSURE
AMES 07-710	1A12C 01 T1 S1	UPPER	VING PRESSURE

POWER	OF	SEPR	GIMBAL
1.000			1.000
1.000	14.720	.429	1.000
1.000	31.260	.916	1.000

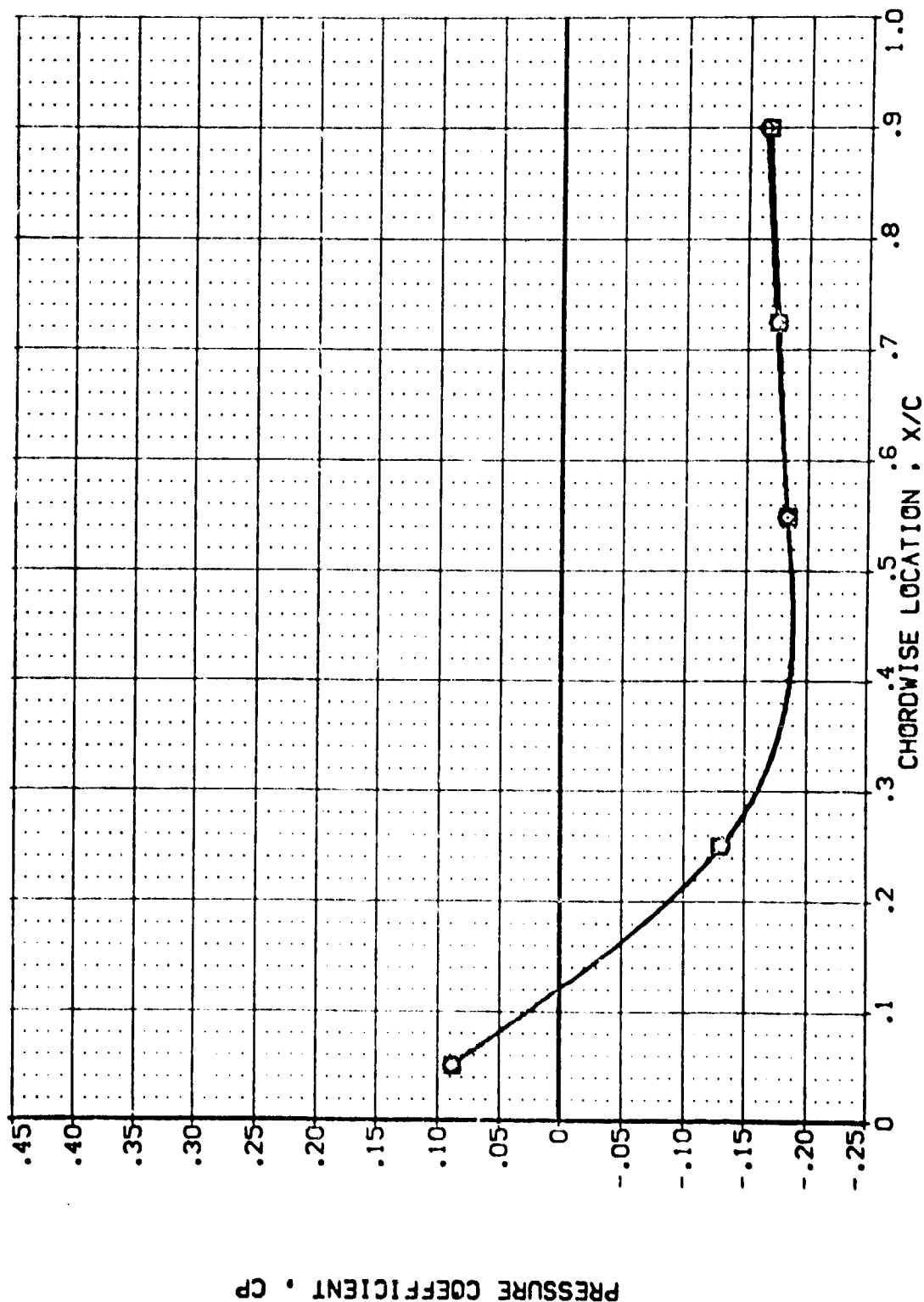


PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

$$\text{MACH} = 2.500 \quad \text{ALPHA} = 6.000 \quad \text{Y/B} = .427$$

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZ037) ASES 67-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (UBZ038) ASES 67-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (UBZ039) ASES 67-710 1A12C 01 T1 S1 UPPER WING PRESSURE

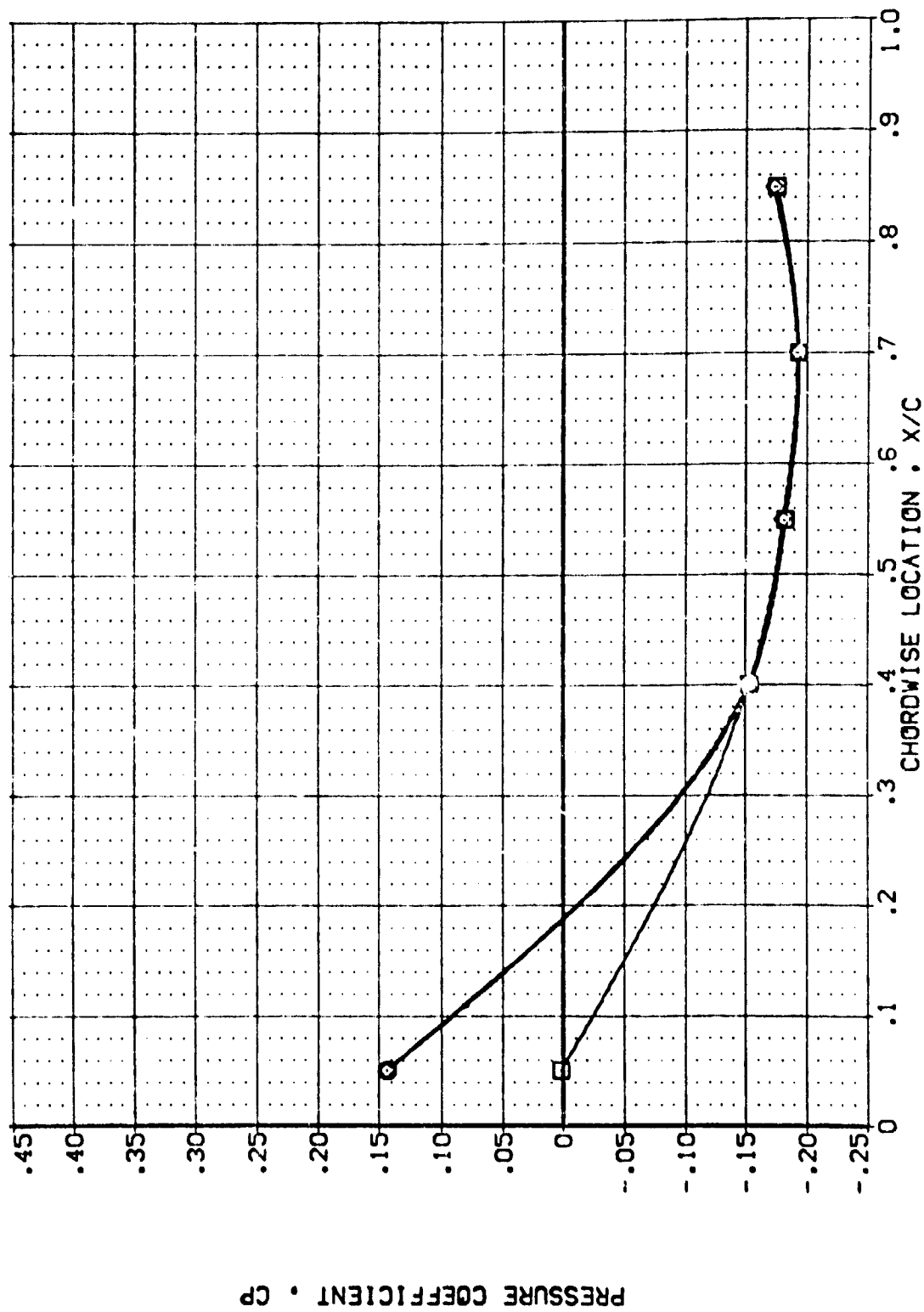
POWER 0.000 GINBAL 1.000
 1.000 14.720 .429 1.000
 1.000 31.260 .916 1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .534

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	DPR	SRPR	GIMBAL
(US20037)	AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	.000	14.720	.429	1.000
(US20038)	AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	1.000	31.260	.916	1.000
(US20034)	AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	1.000			1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

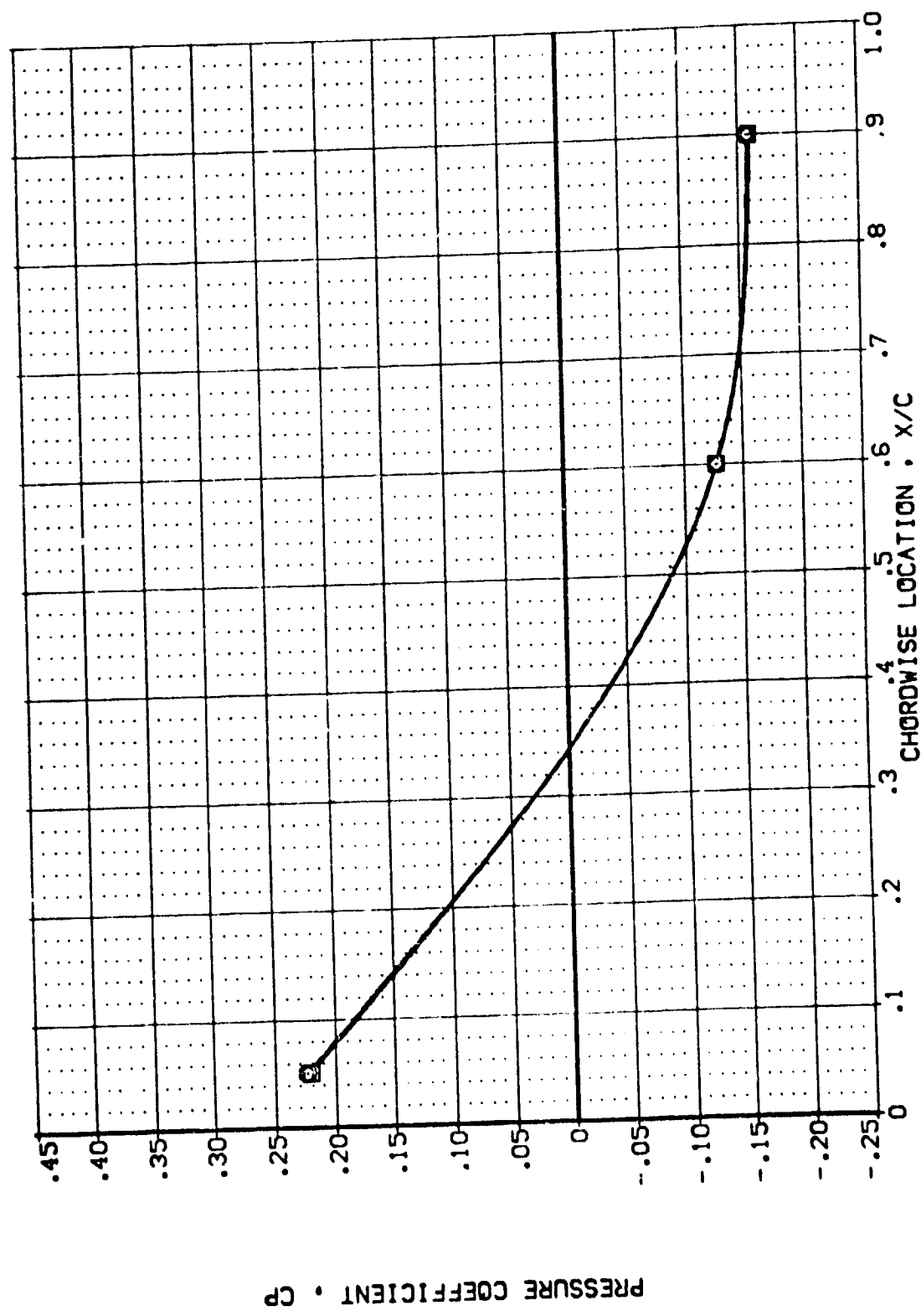
MACH = 2.500 ALPHA = 6.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(L8Z037)
(L8Z026)
(L8Z034)

AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER C/P SR-PR GIMBAL
1.000 14.720 1.000
1.000 31.260 1.000



PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

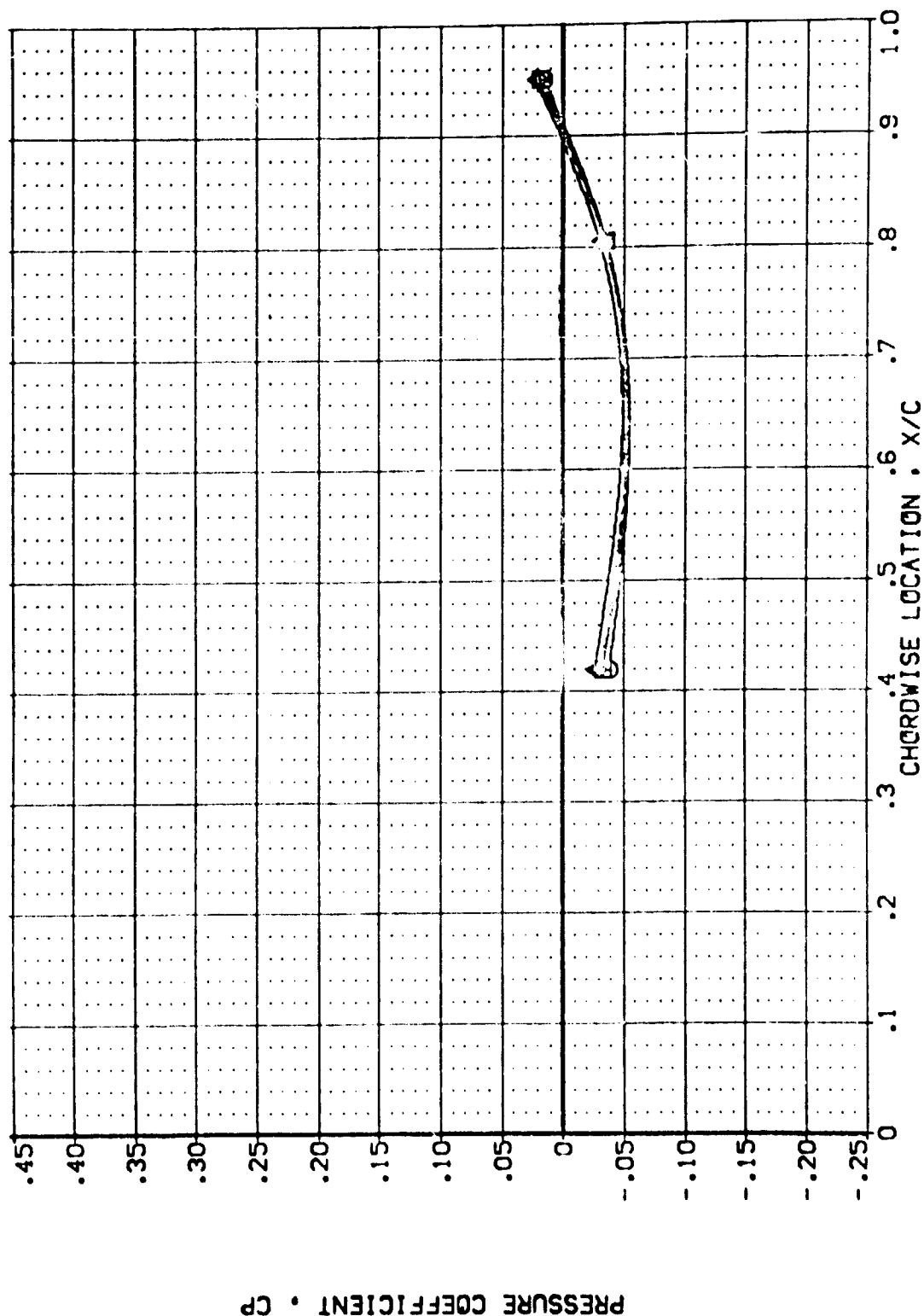
MACH = 2.500 ALPHA = 6.000 Y/B = .887

DATA SET SYMBOL

(UBZ038)
(UBZ042)
(UBZ041)
(UBZ045)

CONFIGURATION DESCRIPTION
AVES 87-710 IAI2C 01 T1 SI UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 SI UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 SI UPPER WING PRESSURE

POWER GPR SRRP GIMBAL
.000 14.400 .412 1.000
1.000 26.650 .758 1.000
1.000 41.000 1.150 1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL
 (UBZ0038)
 (UBZ042)
 (UBZ041)
 (UBZ045)

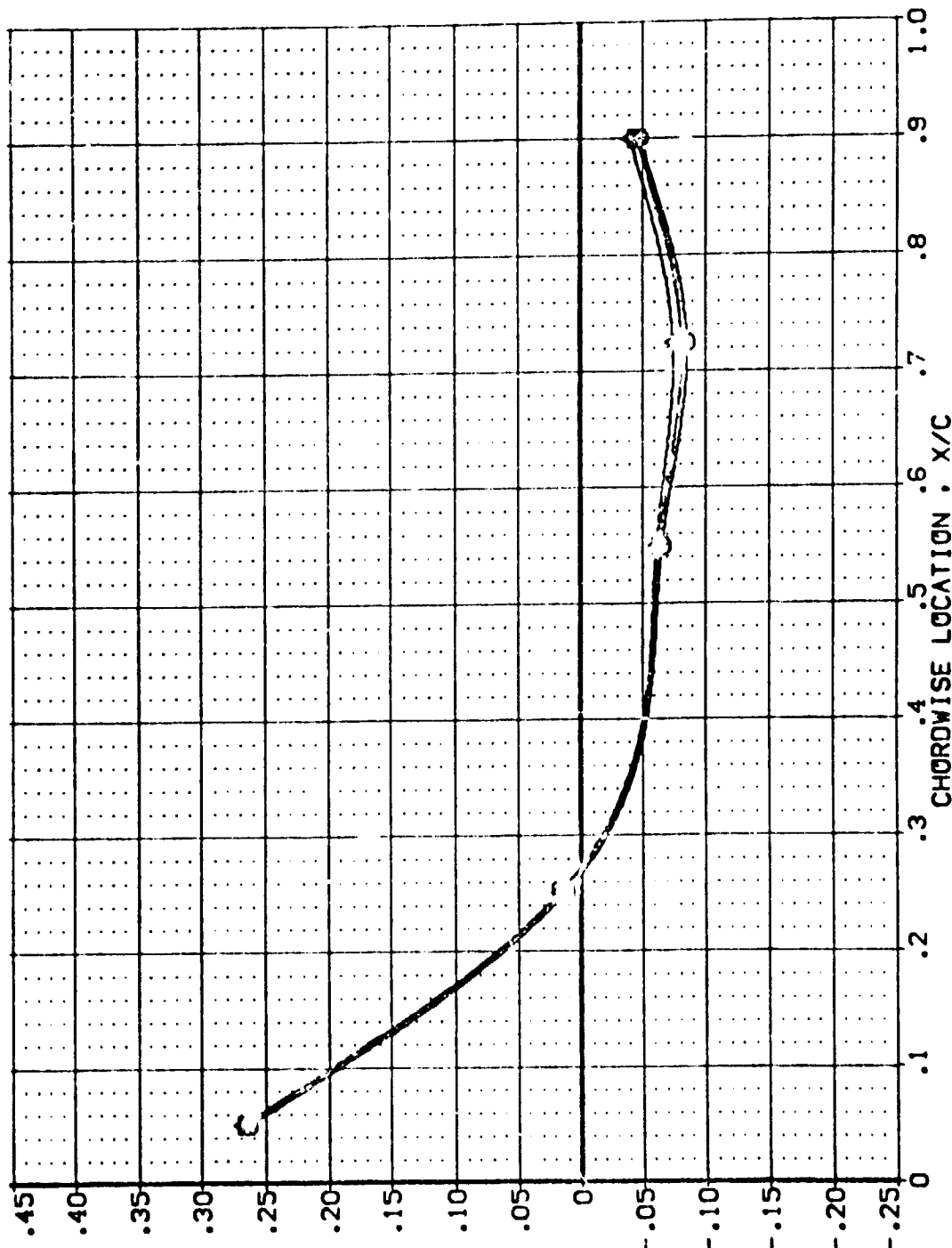
CONFIGURATION DESCRIPTION
 AYES 87-710
 AYES 87-710
 AYES 87-710

POWER
 .000
 1.000
 1.000

UPPER WING PRESSURE
 UPPER WING PRESSURE
 UPPER WING PRESSURE

SRPR
 .412
 .768
 1.150

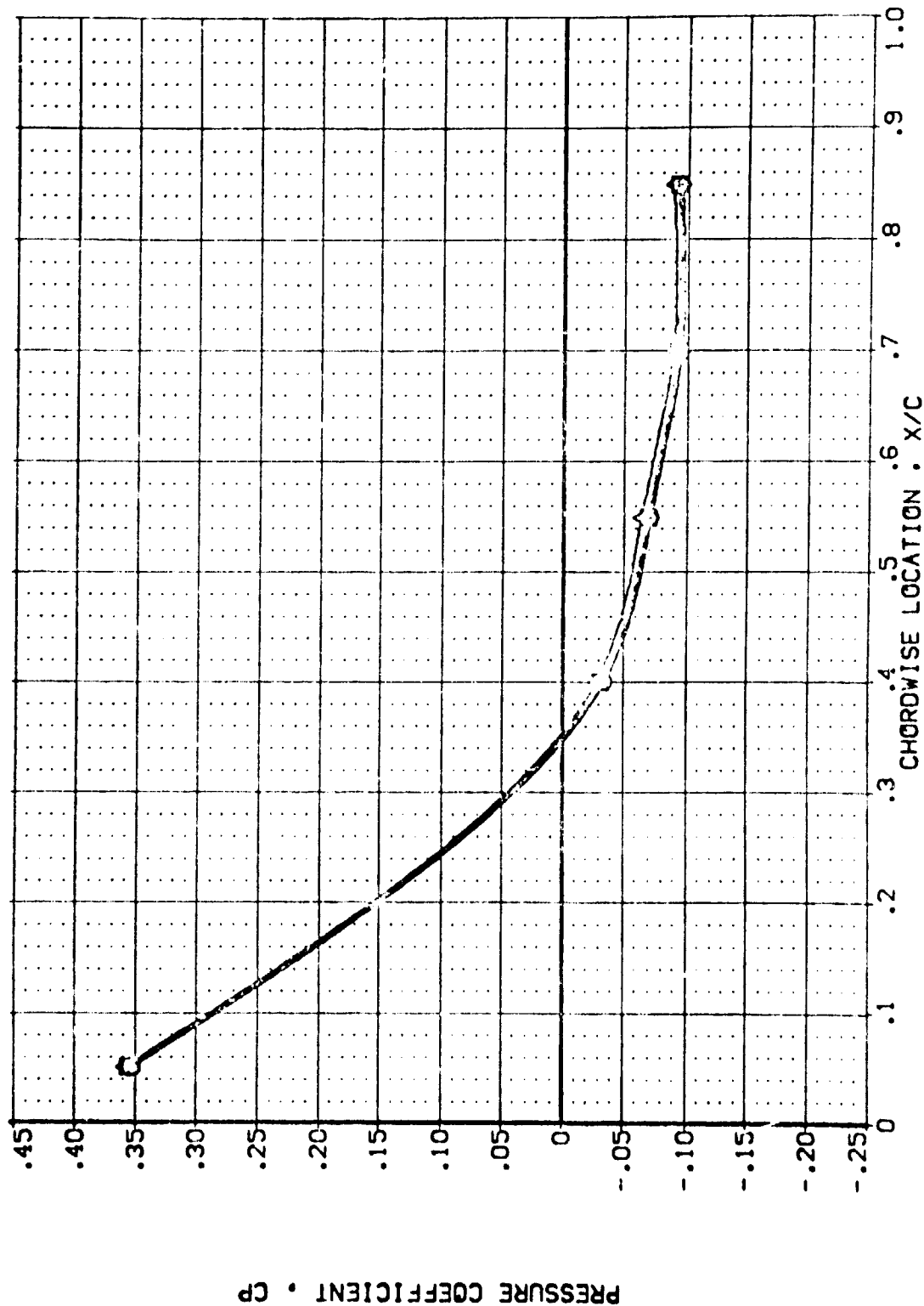
GIMBAL
 1.000
 1.000
 1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	QPR	SWPR	QIMBAL
(UB2038)	AVES 87-710 [A]ZC 01 T1 S1	.000	14.400	.412	1.000
(UB2042)	AVES 87-710 [A]ZC 01 T1 S1	1.000	26.000	.768	1.000
(UB2041)	AVES 87-710 [A]ZC 01 T1 S1	1.000	41.000	1.150	1.000
(UB2045)	AVES 87-710 [A]ZC 01 T1 S1	1.000			



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

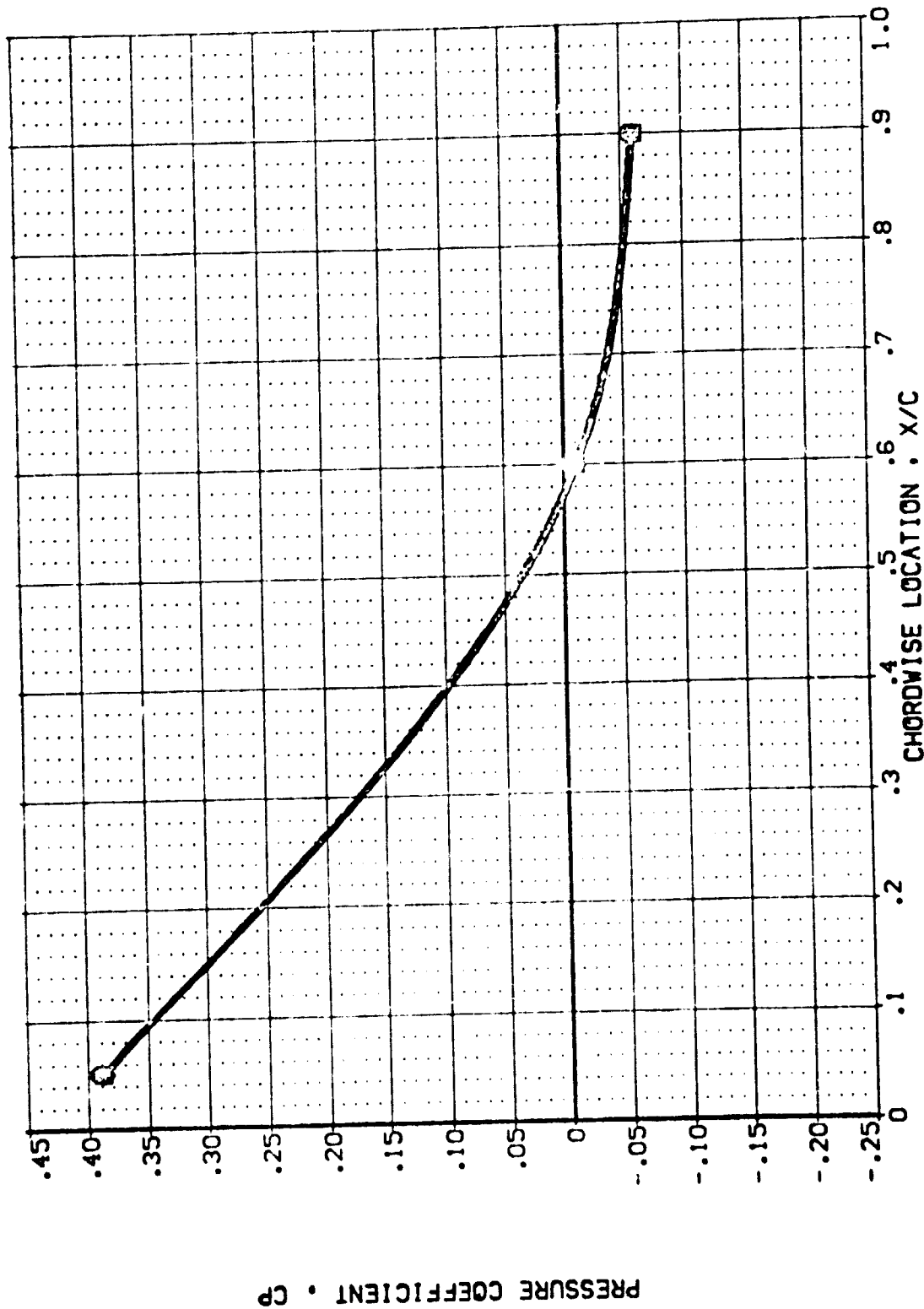
MACH = 3.000 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[UBZ038]	AMES 87-710	IA12C	01	T1	SI	UPPER WING PRESSURE
[UBZ042]	AMES 87-710	IA12C	01	T1	SI	UPPER WING PRESSURE
[UBZ041]	AMES 87-710	IA12C	01	T1	SI	UPPER WING PRESSURE
[UBZ045]	AMES 87-710	IA12C	01	T1	SI	UPPER WING PRESSURE

POWER GPR ST-PR GIMBAL

.000	14.400	.412	1.000
1.000	26.000	.708	1.000
1.000	41.000	1.150	1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UJ1008)
(UJ1042)
(UJ1041)
(UJ1043)

AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER

.000
.000
.000
.000

QPR

14.400
26.800
41.000

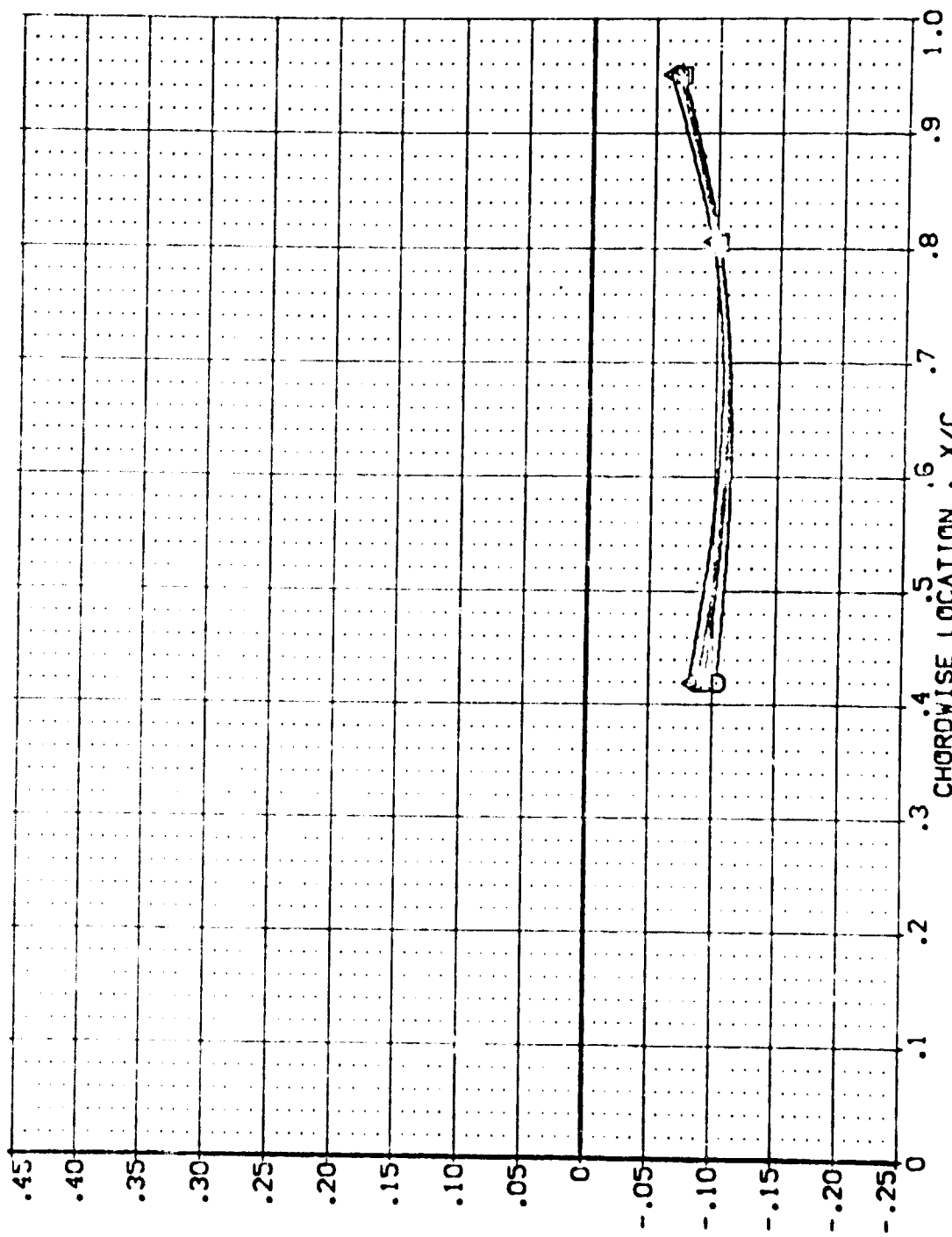
SPRFR

.412
.708
1.150

GIMBAL

1.000
1.000
1.000
1.000

PRESSURE COEFFICIENT, CP

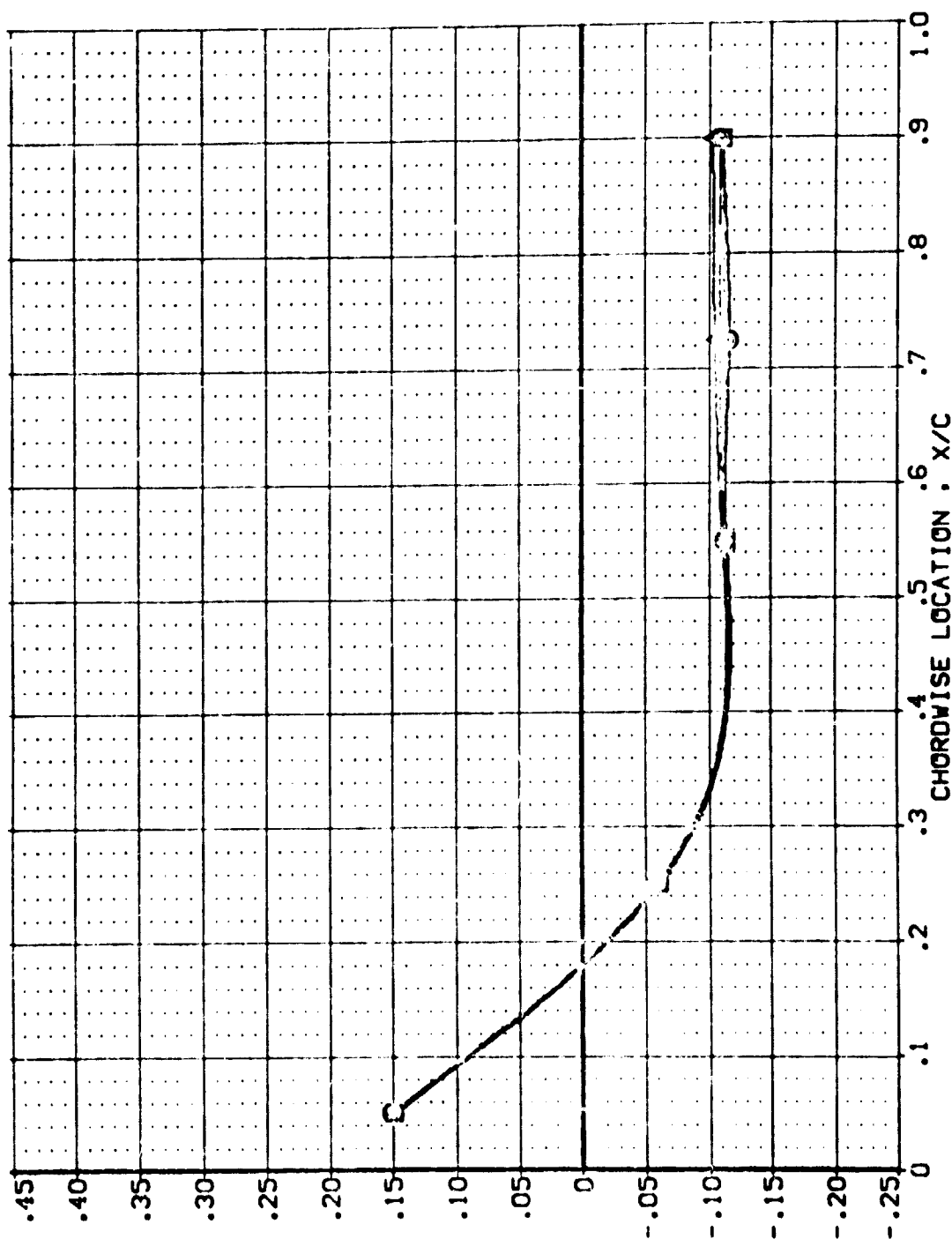


PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER QFR SQFR GINBAL

(U07C03)	AVES 87-710	IA12C 01 TI SI	UPPER WING PRESSURE	.000	14.400	.412	1.000
(U07C02)	AVES 87-710	IA12C 01 TI SI	UPPER WING PRESSURE	1.000	26.630	.763	1.000
(U07C01)	AVES 87-710	IA12C 01 TI SI	UPPER WING PRESSURE	1.000	41.000	1.150	1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

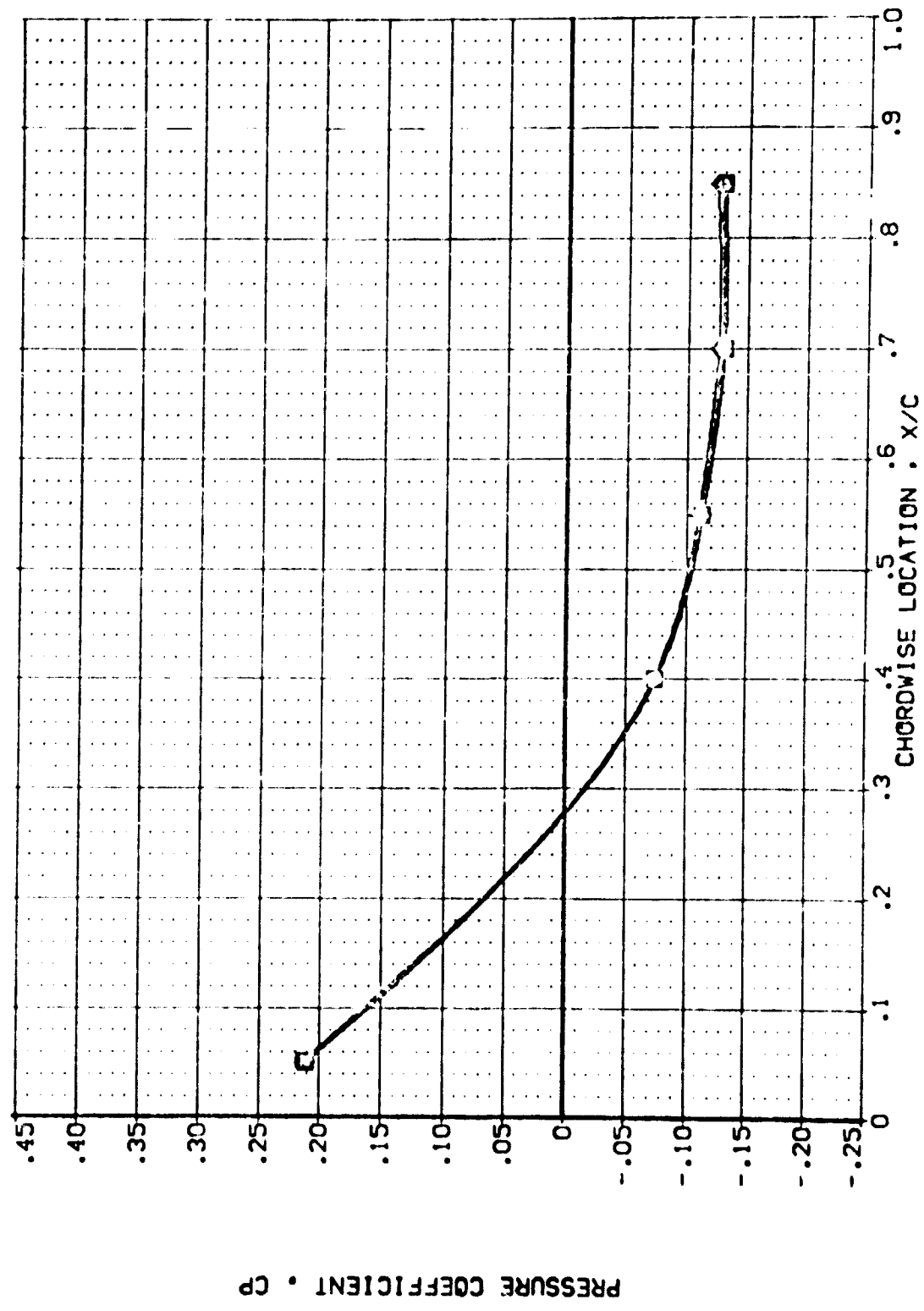
MACH = 3.000 ALPHA = .000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(U12008)	ANES 87-710	AI2C 01	T1	SI	UPPER WING PRESSURE
(U12042)	ANES 87-710	AI2C 01	T1	SI	UPPER WING PRESSURE
(U12041)	ANES 87-710	AI2C 01	T1	SI	UPPER WING PRESSURE
(U12045)	ANES 87-710	AI2C 01	T1	SI	UPPER WING PRESSURE

POWER DBR SNRPR GINBAL

.000	14.400	.412	1.000
1.000	26.640	.728	1.000
1.000	41.000	1.150	1.000

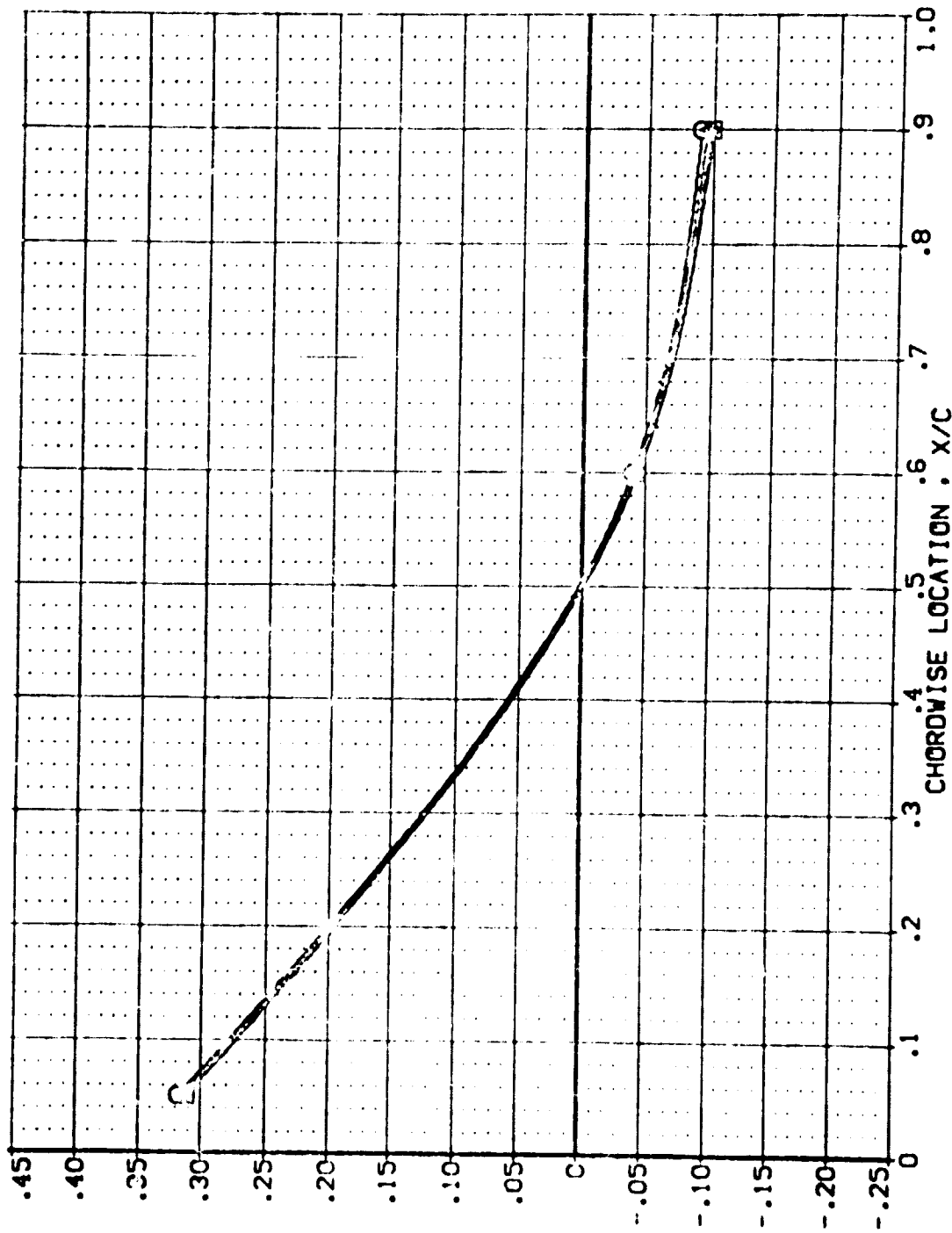


PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UB7038) AVE'S 87-710 IALZC 01 T1 S1
 (UB7042) AVE'S 87-710 IALZC 01 T1 S1
 (UB7041) AVE'S 87-710 IALZC 01 T1 S1
 (UB7045) AVE'S 87-710 IALZC 01 T1 S1

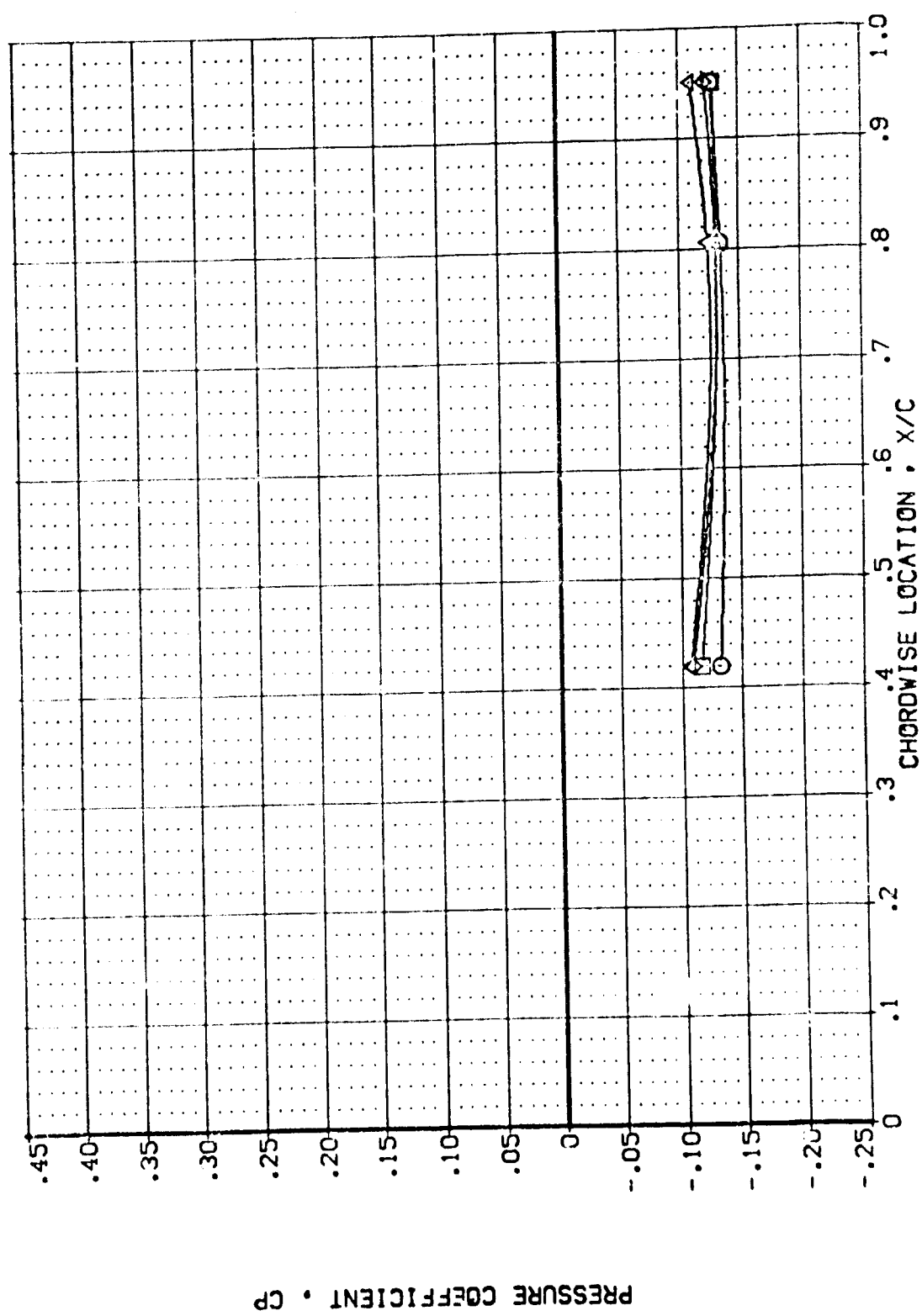
POWER GPR GPR GPR GPR
 .000 14.400 .412 1.000
 1.000 26.630 .763 1.000
 1.000 41.000 1.150 1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .887

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SNRPR	GIMBAL
(U87008)	AVES 87-710	.000	14.400	.412	1.000
(U87042)	AVES 87-710	1.000	26.600	.788	1.000
(U87041)	AVES 87-710	1.000	41.000	1.150	1.000
(U87045)	AVES 87-710	1.000			



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .427

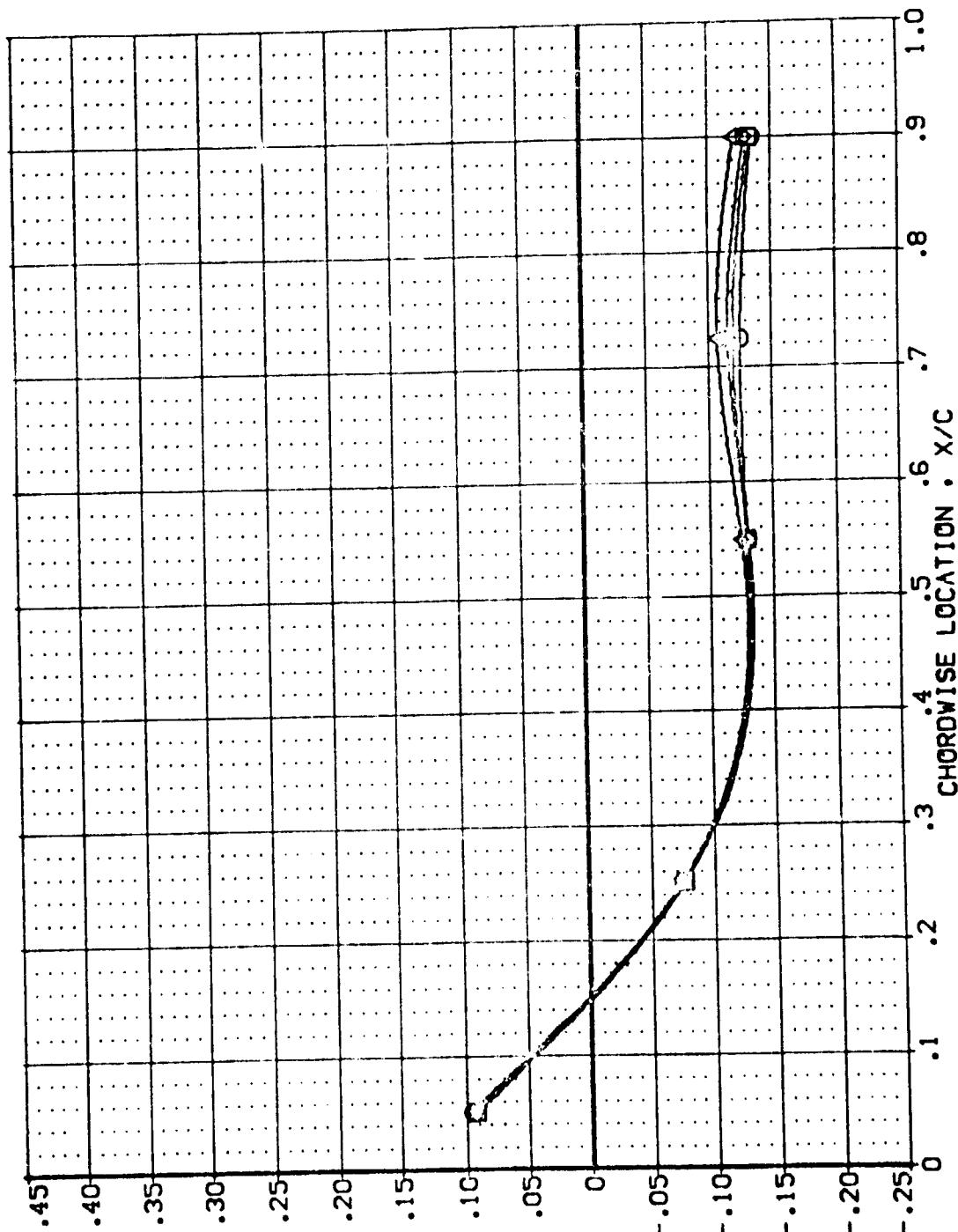
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CPR SR-PR CINEAL

(UBZD38) AHES 87-710 IAI2C 01 TI SI UPPER WING PRESSURE .000 14.400 .412 1.000

(UBZD42) AHES 87-710 IAI2C 01 TI SI UPPER WING PRESSURE 1.000 26.850 .789 1.000

(UBZD41) AHES 87-710 IAI2C 01 TI SI UPPER WING PRESSURE 1.000 41.000 1.150 1.000

(UBZD45)



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

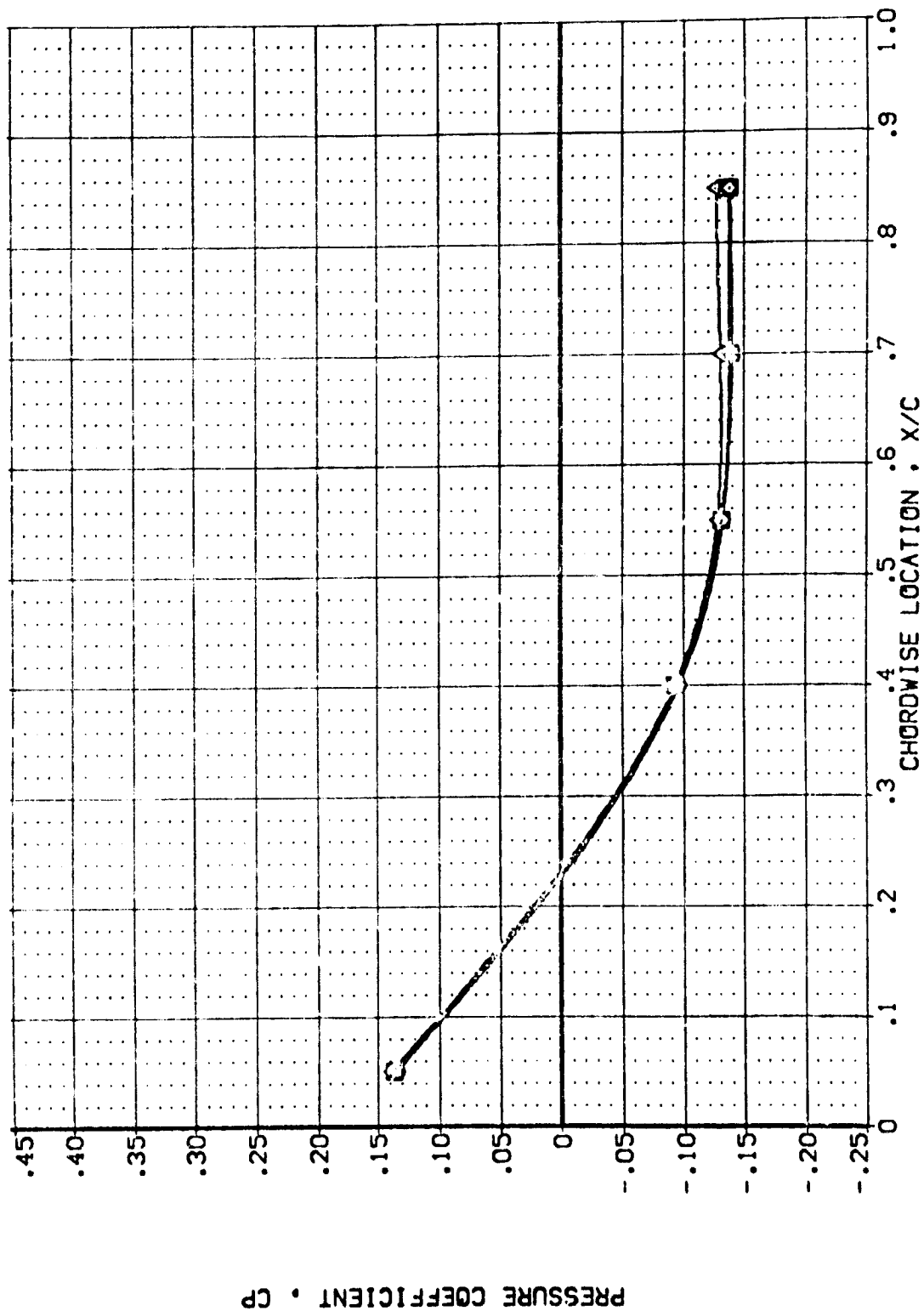
MACH = 3.000 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UR2038)
(UR2042)
(UR2041)
(UR2045)

AMES 87-710 [A12C 01 T] S1 UPPER WING PRESSURE
AMES 87-710 [A12C 01 T] S1 UPPER WING PRESSURE
AMES 87-710 [A12C 01 T] S1 UPPER WING PRESSURE
AMES 87-710 [A12C 01 T] S1 UPPER WING PRESSURE

POWER C/R SR-PR 01HEAL
.000 14.400 .412 1.000
1.000 26.850 .768 1.000
1.000 41.000 1.150 1.000

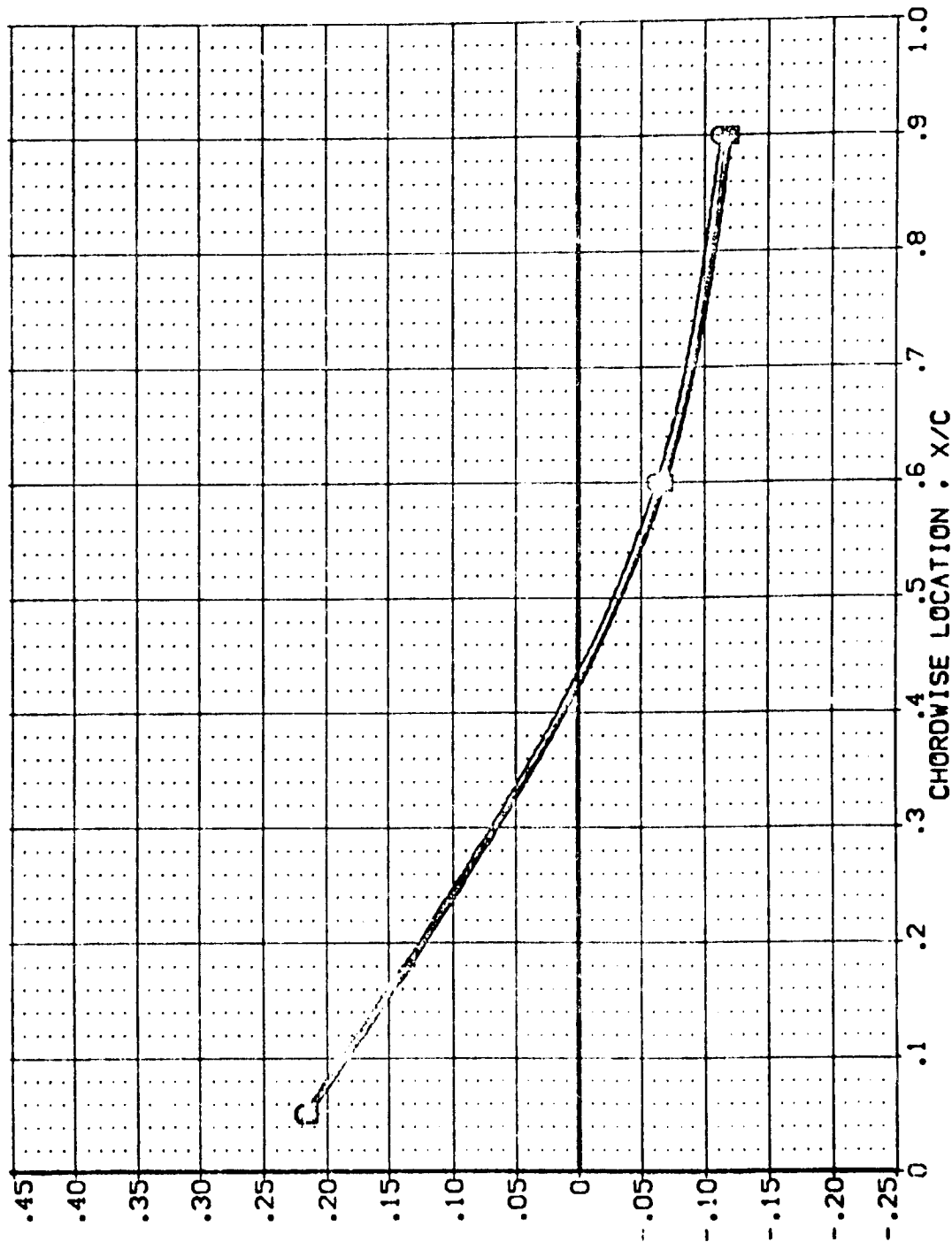


PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZ008) AYES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (UBZ042) AYES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (UBZ041) AYES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (UBZ045) AYES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE

POWER GPR SPRR GINBAL
 .000 14.400 .412 1.000
 1.000 26.630 .783 1.000
 1.000 41.000 1.150 1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB0046)
(UB0049)
(UB0050)
(UB0053)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01
IA12C 01
IA12C 01
IA12C 01

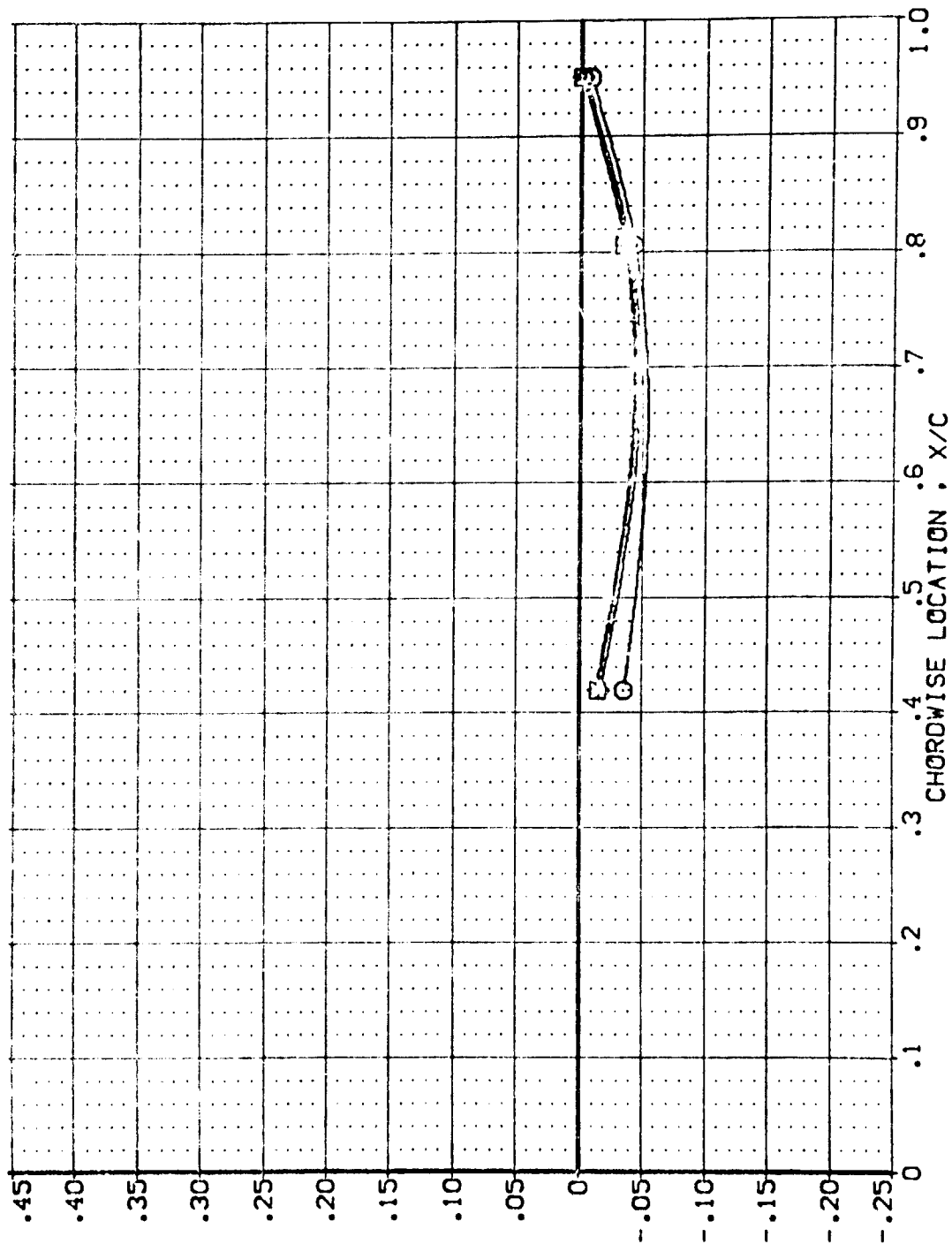
T1 S1
T1 S1
T1 S1
T1 S1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER CDR SRPR GIMBAL

.000 13.170 .456 1.000
1.000 23.850 .836 1.000
1.000 41.000 1.150 1.000

PRESSURE COEFFICIENT • CP



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL

(UBZ045)
(UBZ049)
(UBZ050)
(UBZ053)

AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

AI2C 01 TI SI
AI2C 01 TI SI
AI2C 01 TI SI
AI2C 01 TI SI

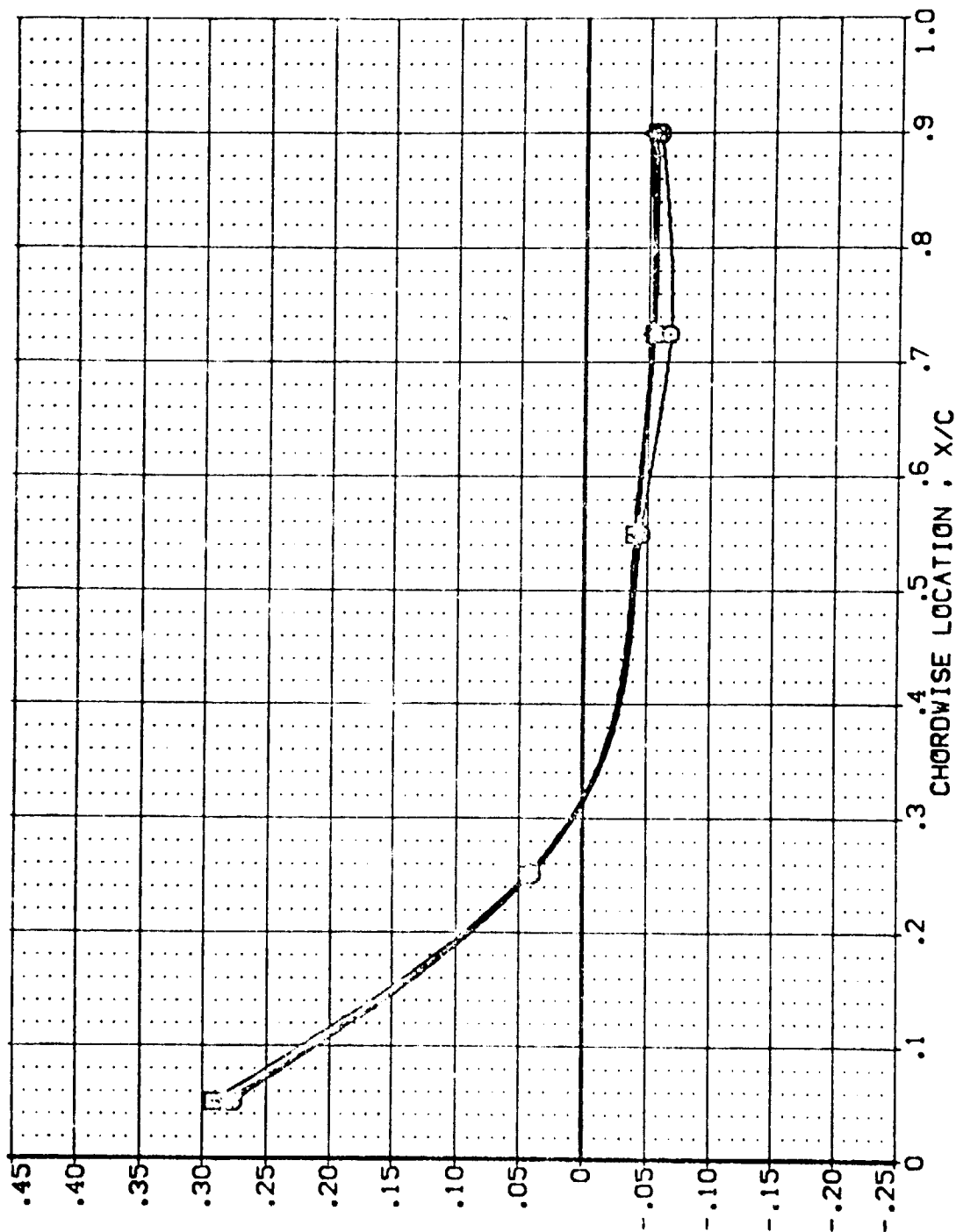
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER
POWER
POWER
POWER

OPR
OPR
OPR
OPR

STPR
STPR
STPR
STPR

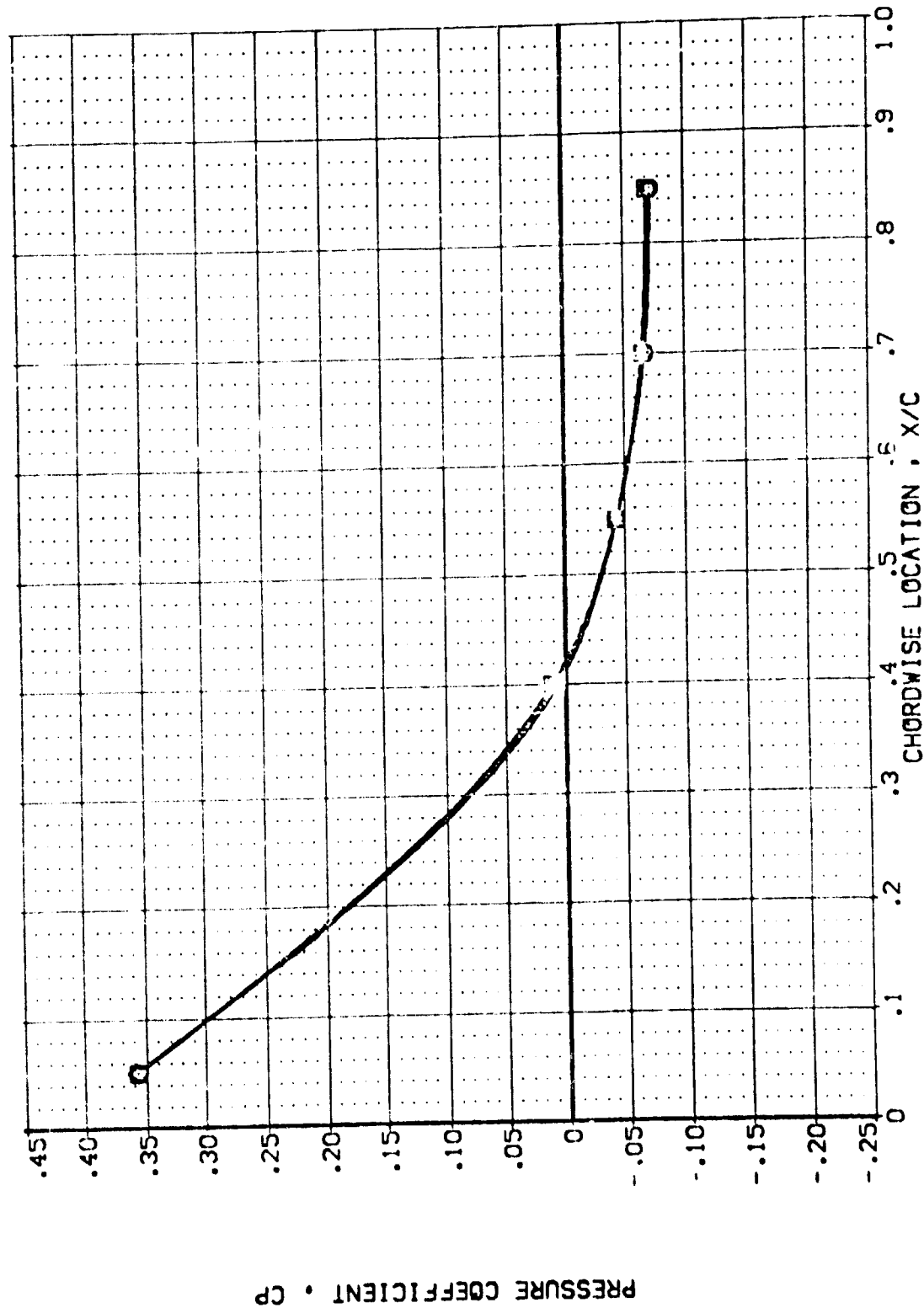
GIMBAL
GIMBAL
GIMBAL
GIMBAL



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SWPR	GINBAL
(UB3046)	AVES 87-710 [A] 2C 01 T1 S1	.000	13.170	.456	1.000
(UB3049)	AVES 87-710 [A] 2C 01 T1 S1	1.000	23.820	.826	1.000
(UB3050)	AVES 87-710 [A] 2C 01 T1 S1	1.000	41.000	1.150	1.000
(UB3053)	AVES 87-710 [A] 2C 01 T1 S1	1.000			



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

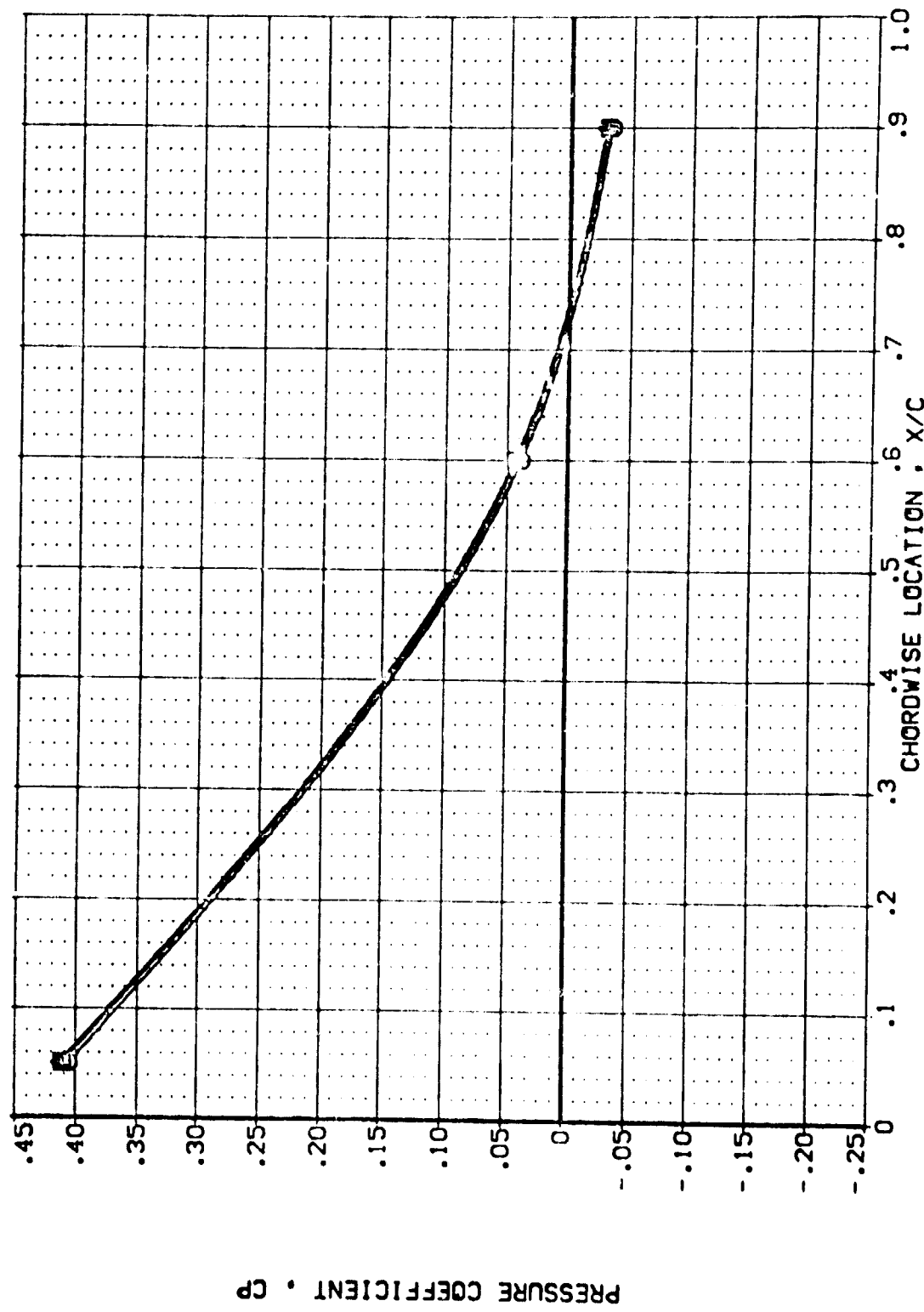
MACH = 3.500 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL

(U82045)
(U82049)
(U82050)
(U82053)

CONFIGURATION DESCRIPTION
A-ES 87-710 IAI2C 01 T1 SI UPPER WING PRESSURE
A-ES 87-710 IAI2C 01 T1 SI UPPER WING PRESSURE
A-ES 87-710 IAI2C 01 T1 SI UPPER WING PRESSURE

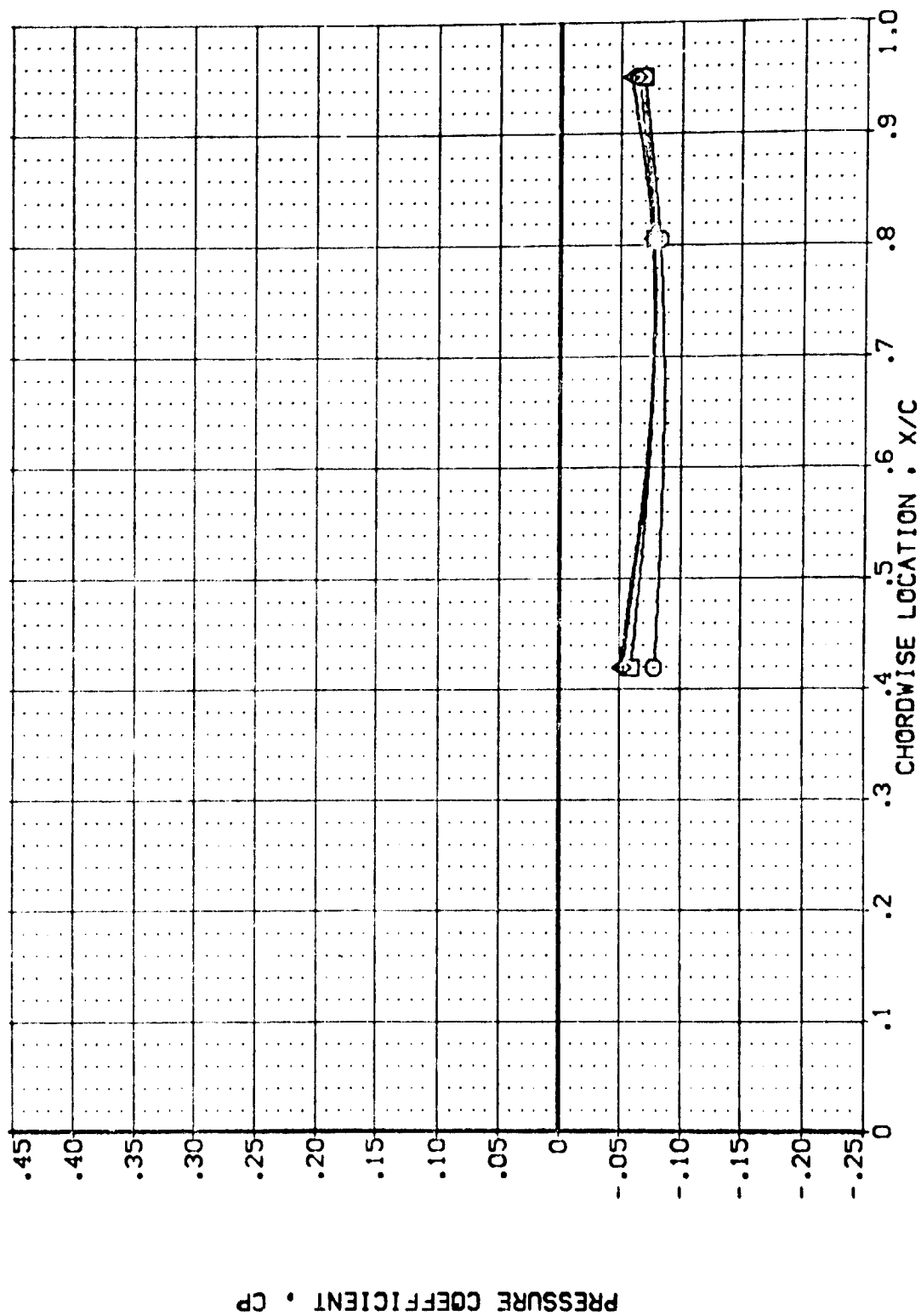
POWER QPR STAFF GIMBAL
.000 13.170 .456 1.000
1.000 23.860 .826 1.000
1.000 41.000 1.150 1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SNPR	GIMBAL
(UBZD46)	AMES 87-710 [A]2C 01 T1 S1	.000	13.170	.456	1.000
(UBZD49)	AMES 87-710 [A]2C 01 T1 S1	1.000	23.850	.826	1.000
(UBZD50)	AMES 87-710 [A]2C 01 T1 S1	1.000	41.000	1.150	1.000
(UBZD53)	AMES 87-710 [A]2C 01 T1 S1	1.000			



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ046)
(UBZ049)
(UBZ050)
(UBZ053)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01
IA12C 01
IA12C 01
IA12C 01

TI S1
TI S1
TI S1
TI S1

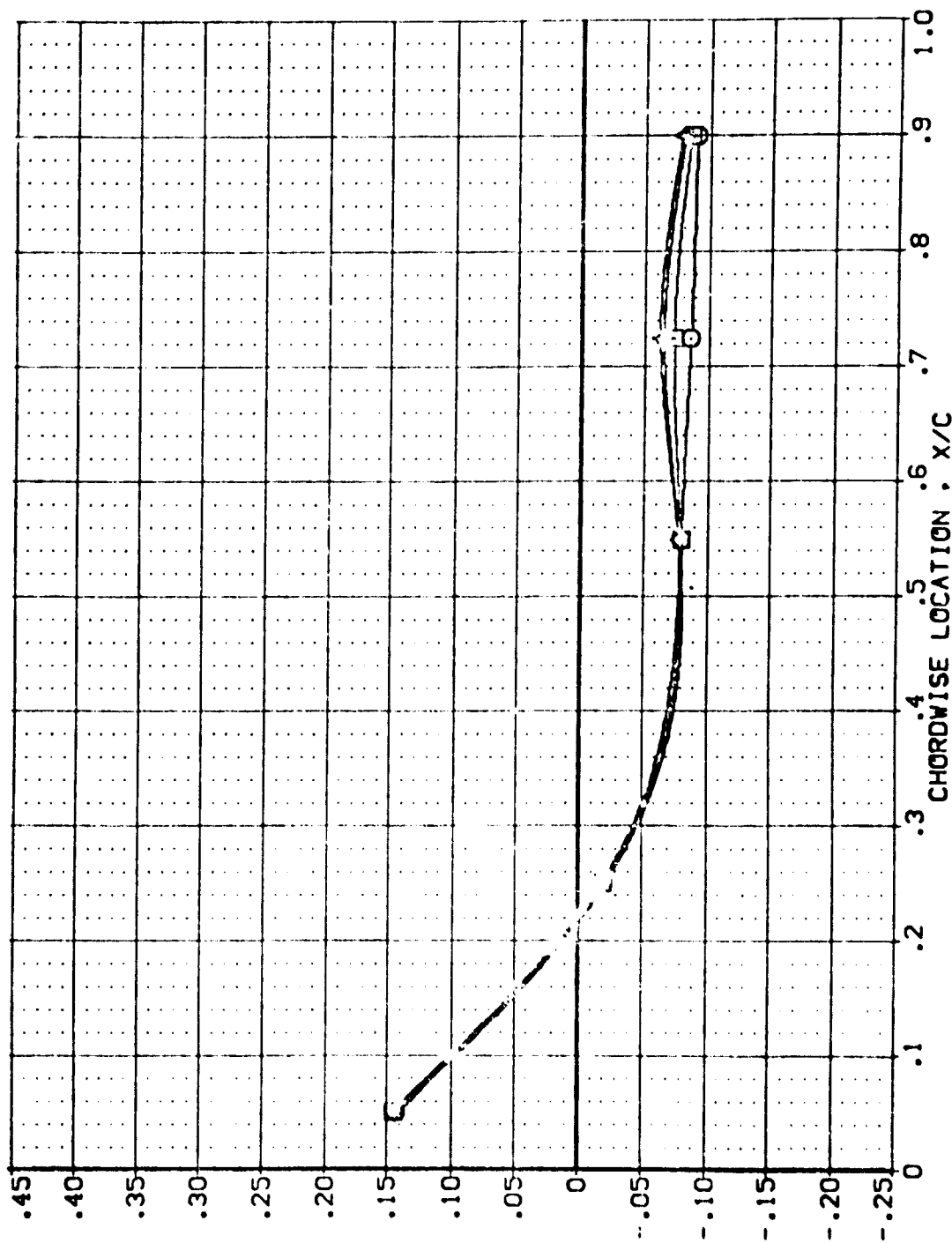
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER
.000
1.000
1.000
1.000

OPR
13.170
23.620
41.000

SEPR
.455
.626
1.150

SIGNAL
1.000
1.000
1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

POWER DPR SRPR GMBAL

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

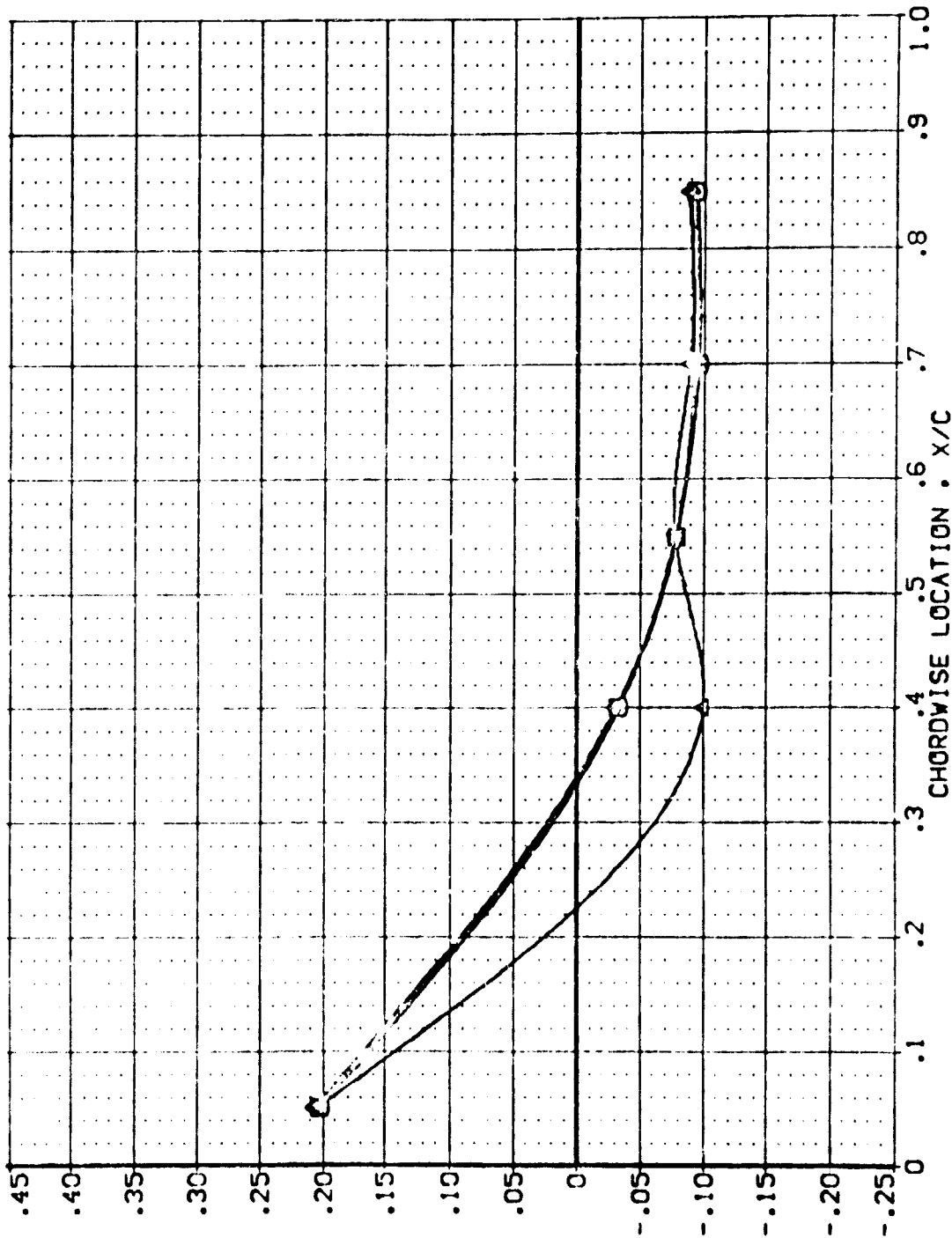
(UB2046)
(UB2049)
(UB2050)
(UB2053)

.000
.000
.000
.000

13.170
23.850
41.000

.456
.826
1.150

1.000
1.000
1.000



PRESSURE COEFFICIENT • CP

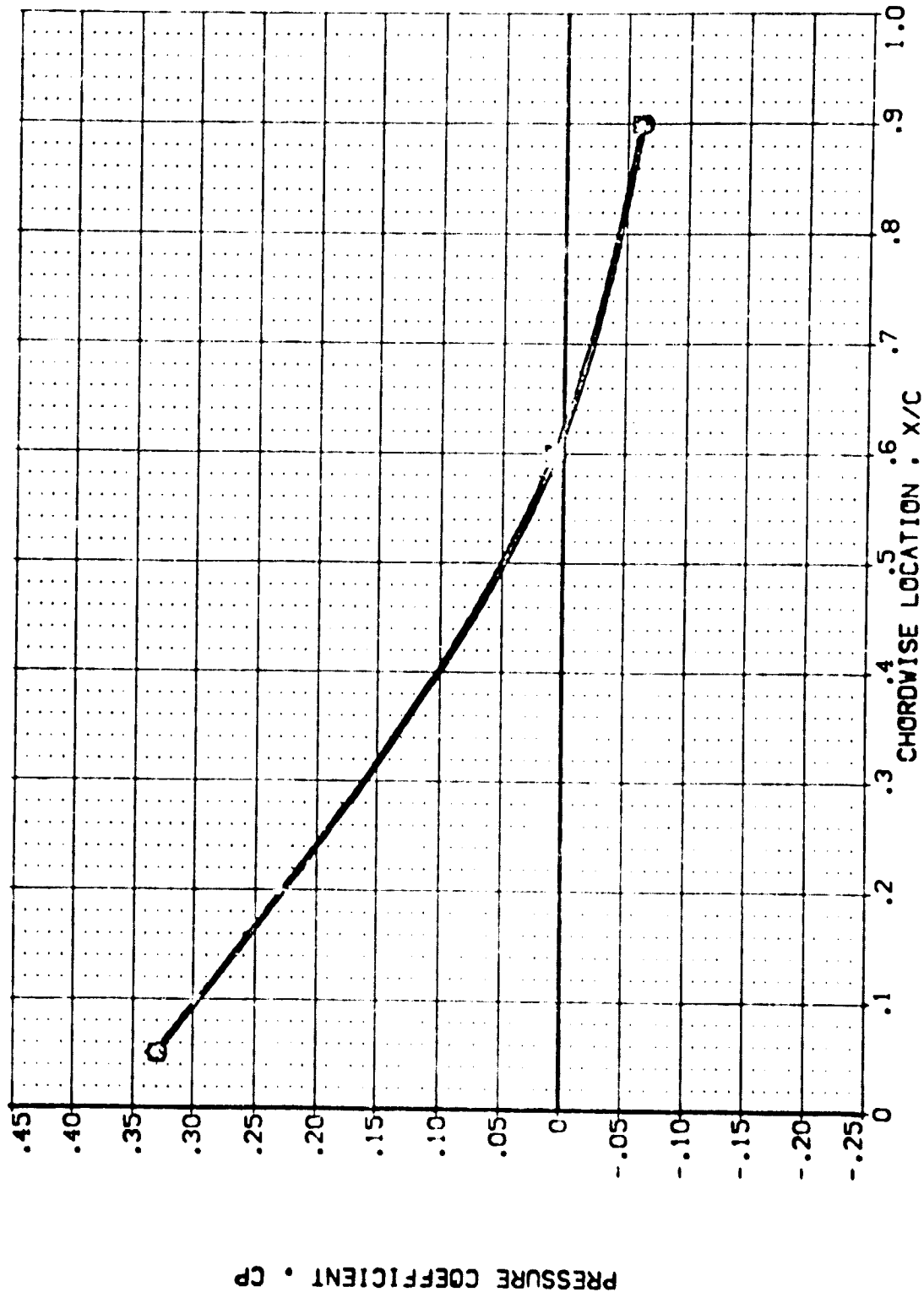
CHORDWISE LOCATION • X/C

PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2046)	AVES 87-710	1A12C 01	T1 S1	UPPER WING PRESSURE	POWER	OPR	SR-PR	GIMBAL
(UB2049)	AVES 87-710	1A12C 01	T1 S1	UPPER WING PRESSURE	.000	13.170	.456	1.000
(UB2050)	AVES 87-710	1A12C 01	T1 S1	UPPER WING PRESSURE	1.000	23.850	.826	1.000
(UB2053)	AVES 87-710	1A12C 01	T1 S1	UPPER WING PRESSURE	1.000	41.000	1.150	1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

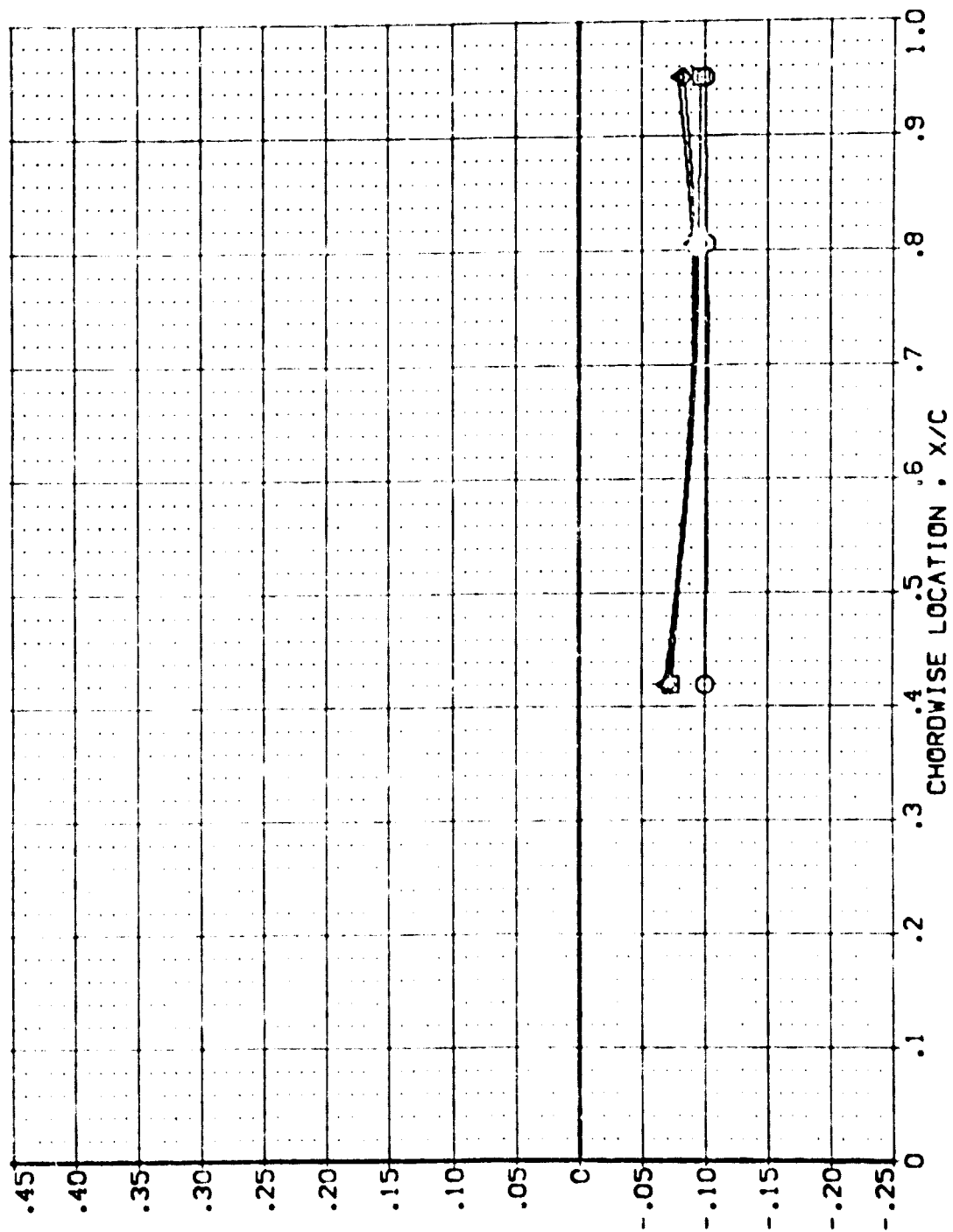
(UBZD46)
(UBZD49)
(UBZD50)
(UBZD53)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

1A12C 01 T1 S1
1A12C 01 T1 S1
1A12C 01 T1 S1
1A12C 01 T1 S1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

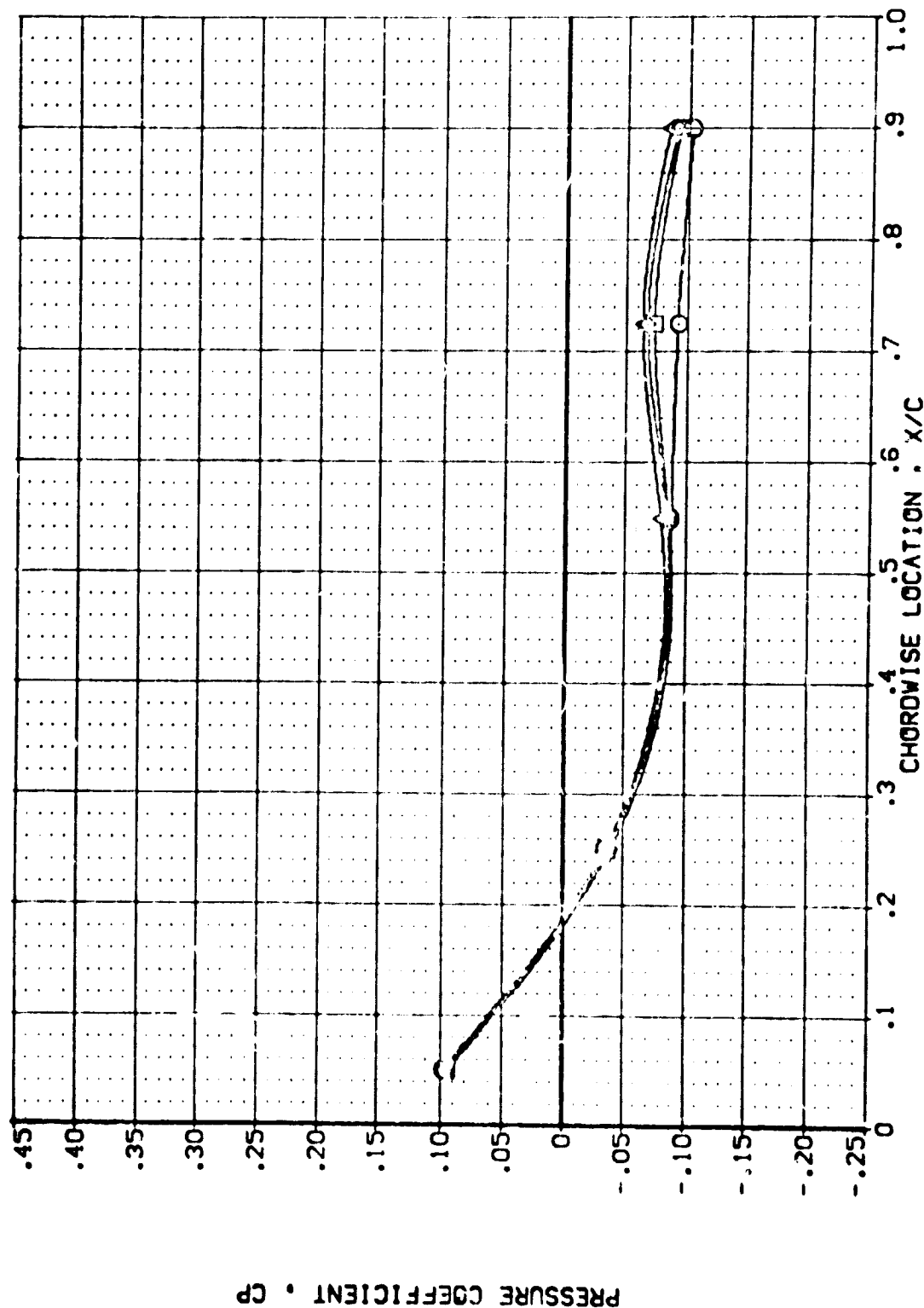
POWER CDR SRPR GIMBAL
.000 13.170 .456 1.000
1.000 23.800 .826 1.000
1.000 41.000 1.150 1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .427

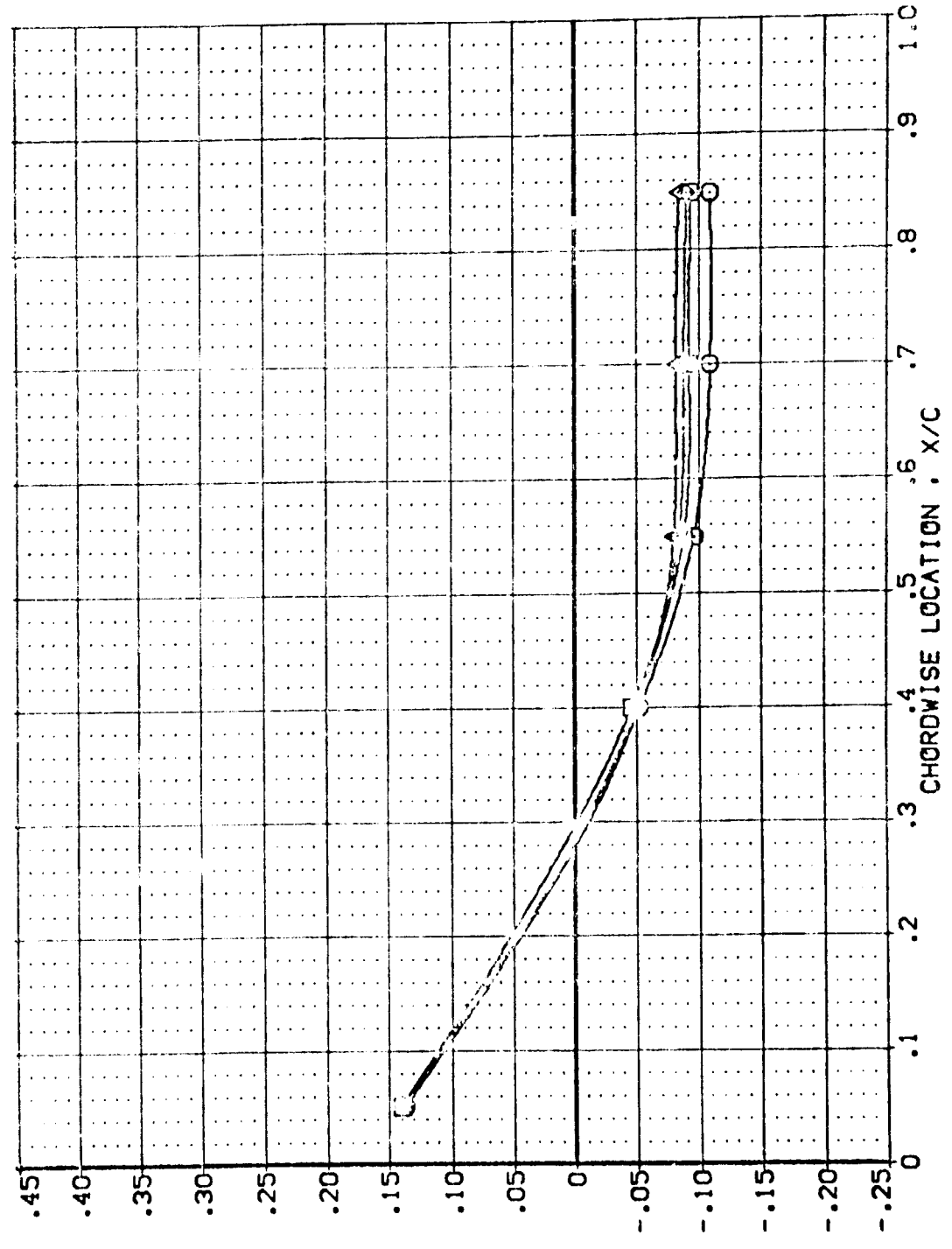
POWER	QPR	STPR	GIMBAL
.000			1.000
1.000	13.170	.456	1.000
1.000	23.860	.826	1.000
1.000	41.000	1.150	1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH =	3.500	ALPHA =	8.000	Y/B	=	.534
--------	-------	---------	-------	-----	---	------

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	QPR	SWPR	GIMBAL
(UBZD46)	AVES 87-710 [A] 2C 01 T1 S1 UPPER WING PRESSURE	.000	13.170	.456	1.000
(UBZD49)	AVES 87-710 [A] 2C 01 T1 S1 UPPER WING PRESSURE	1.000	23.820	.826	1.000
(UBZD50)	AVES 87-710 [A] 2C 01 T1 S1 UPPER WING PRESSURE	1.000	41.000	1.150	1.000



PRESSURE COEFFICIENT • CP

PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZD45)  AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

(UBZD49)  AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

(UBZC50)  AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

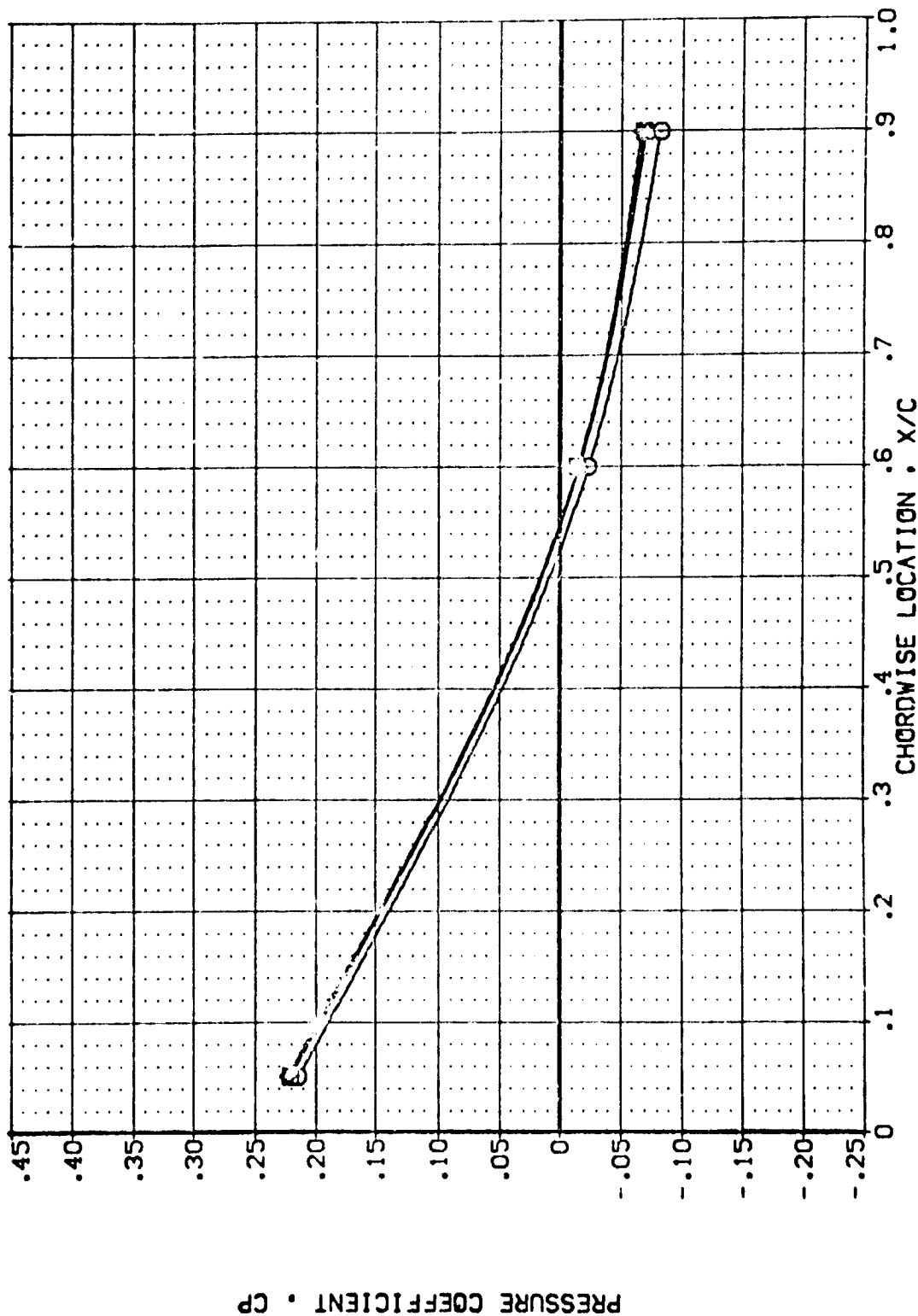
(UBZC53)  AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER QPR SQPR GIMBAL

.000 13.170 .456 1.000

1.000 23.860 .826 1.000

1.000 41.000 1.150 1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ007)
(LBZ008)
(LBZ009)

AMES 87-710
AMES 87-710
AMES 87-710

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

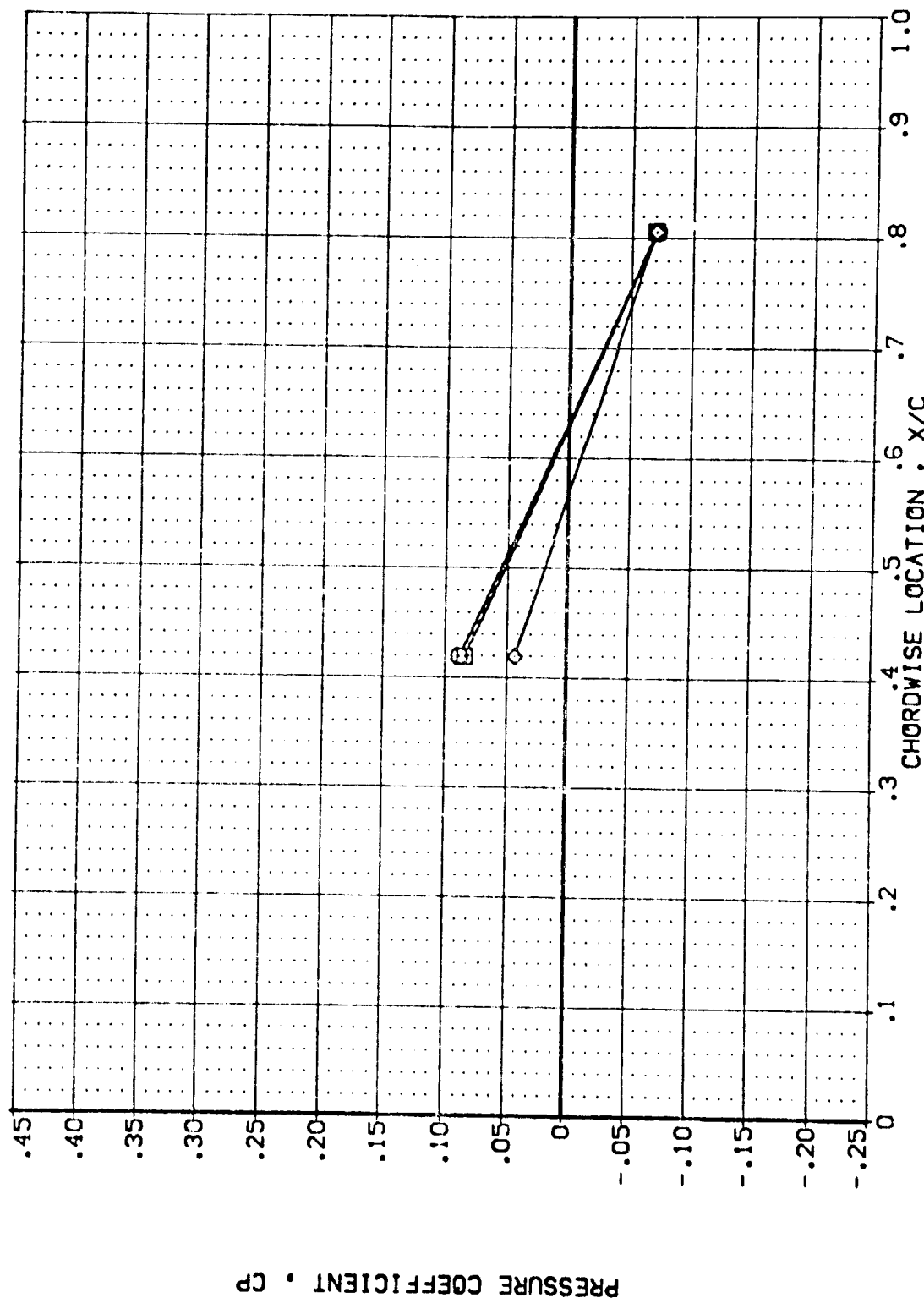
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER .000
1.000
1.000

UPR 14.720
31.260

SR-PR .429
.916

GIMBAL 1.000
1.000
1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL
(LB0037)
(LB7035)
(LB0034)

CONFIGURATION DESCRIPTION
AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 TI SI
IA12C 01 TI SI
IA12C 01 TI SI

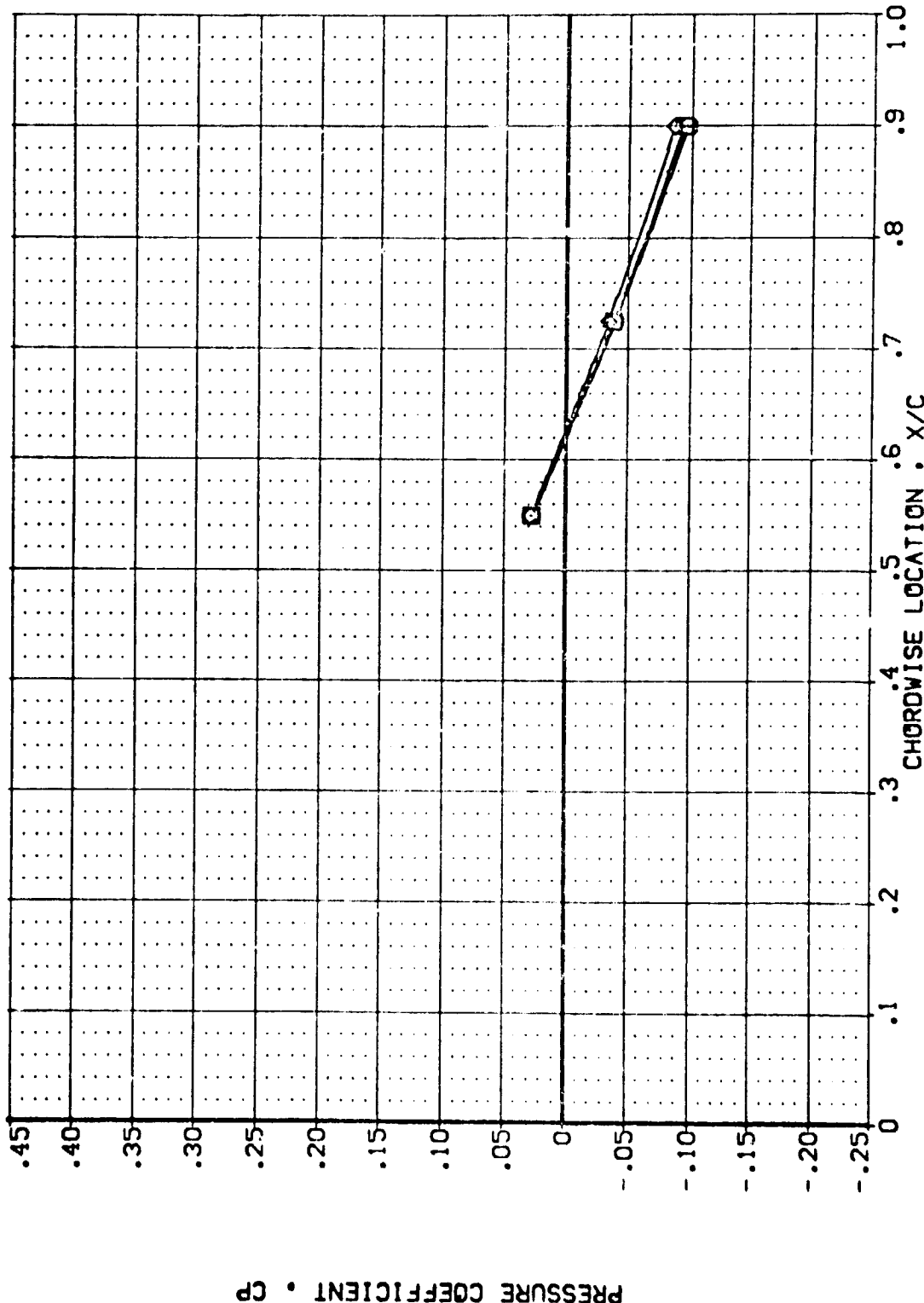
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POVER
.000
1.000
1.000

OPR
14.720
31.260

STPR
.429
.916

GIMBAL
1.000
1.000
1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ037)
(LBZ035)
(LBZ034)

AMES 87-710
AMES 87-710
AMES 87-710

LA12C 01 T1 S1
LA12C 01 T1 S1
LA12C 01 T1 S1

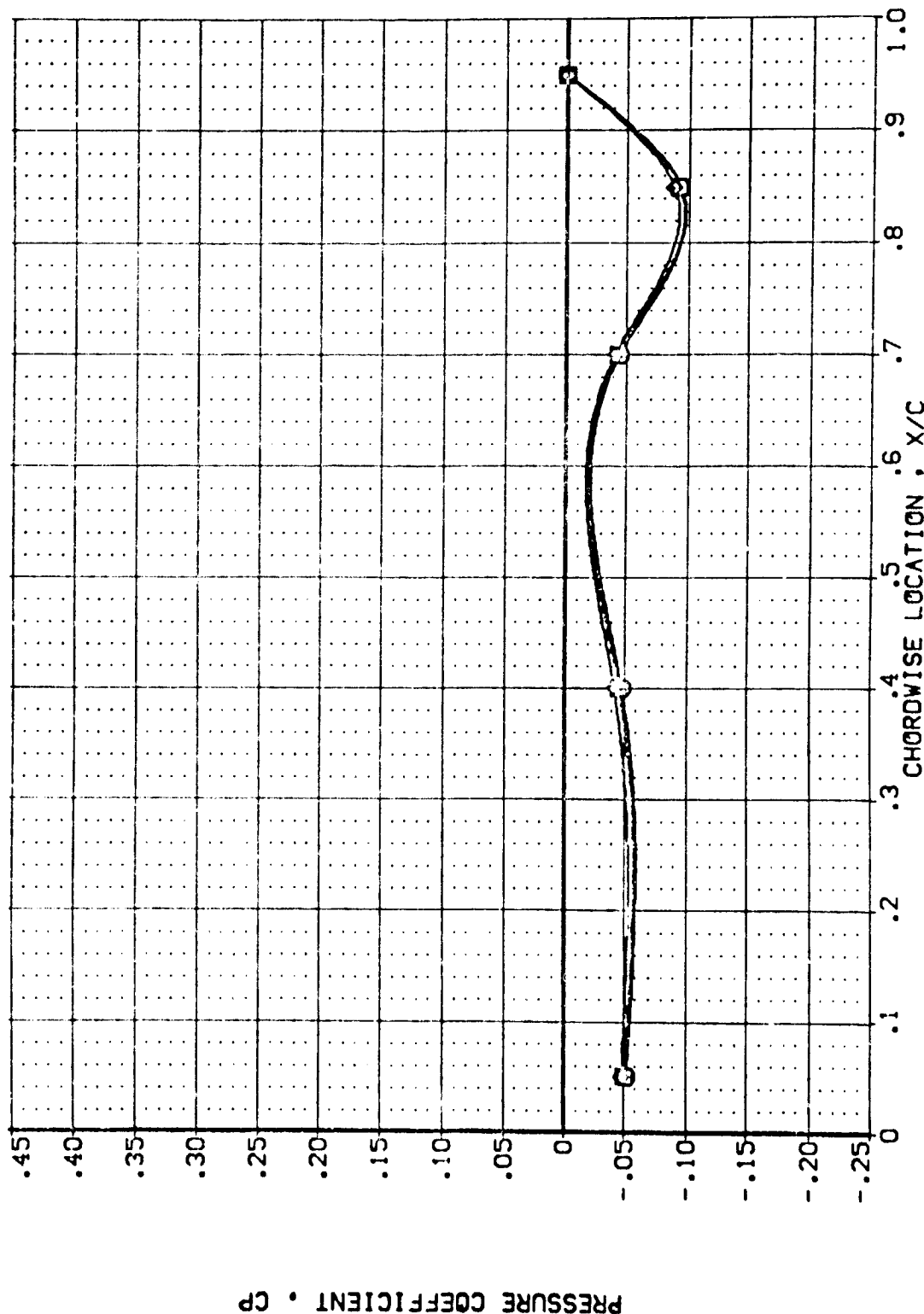
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER 0.000
1.000
1.000

SRPR 0.429
0.916

OPR 14.720
31.260

GIMBAL 1.000
1.000
1.000



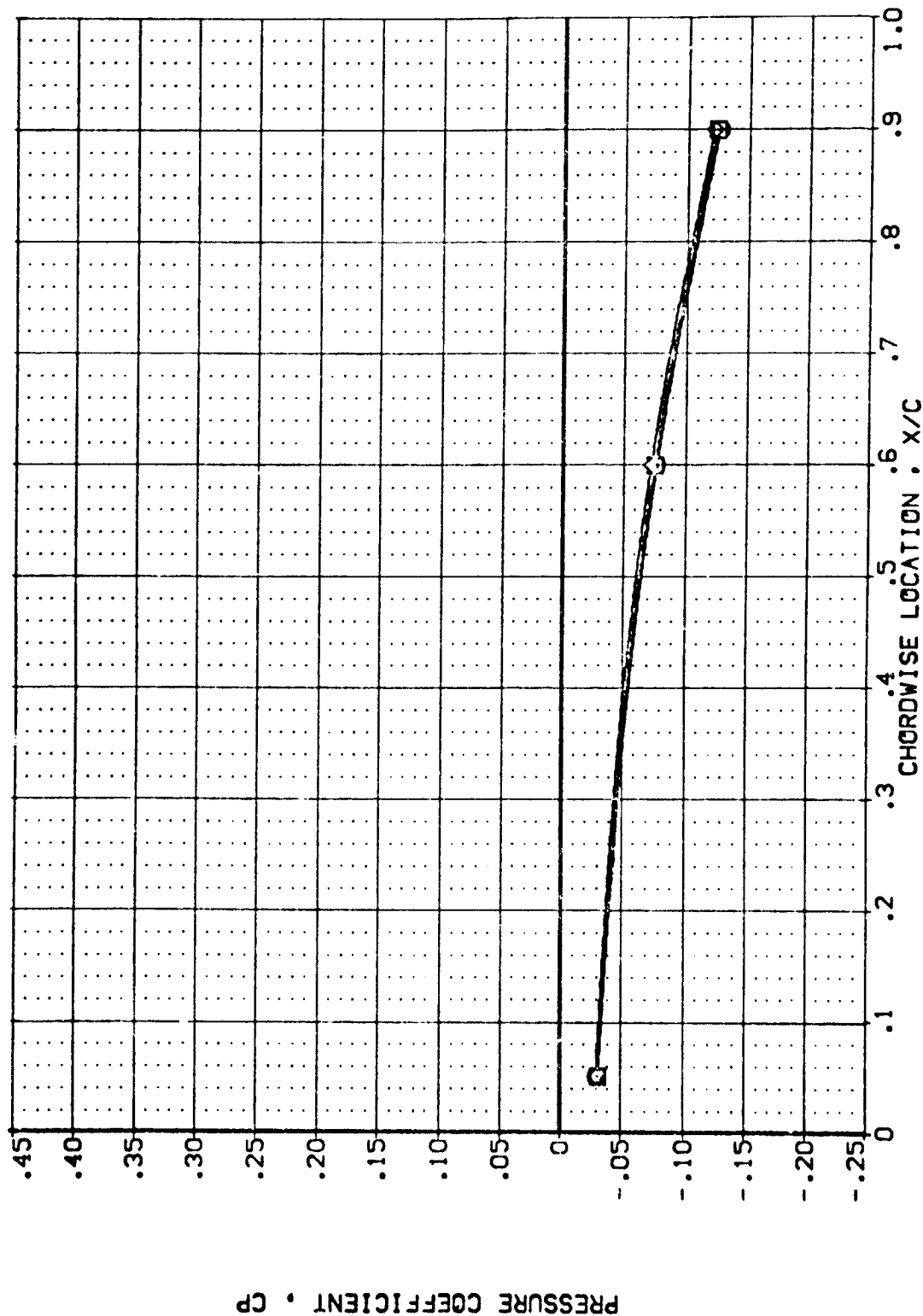
PRESSURE COEFFICIENT • CP

PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZ037) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
 (LBZ038) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
 (LBZ039) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
 (LBZ034) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE

POWER GPR SR-PR GIMBAL
 .000 .000 .429 1.000
 1.000 31.260 1.000 1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

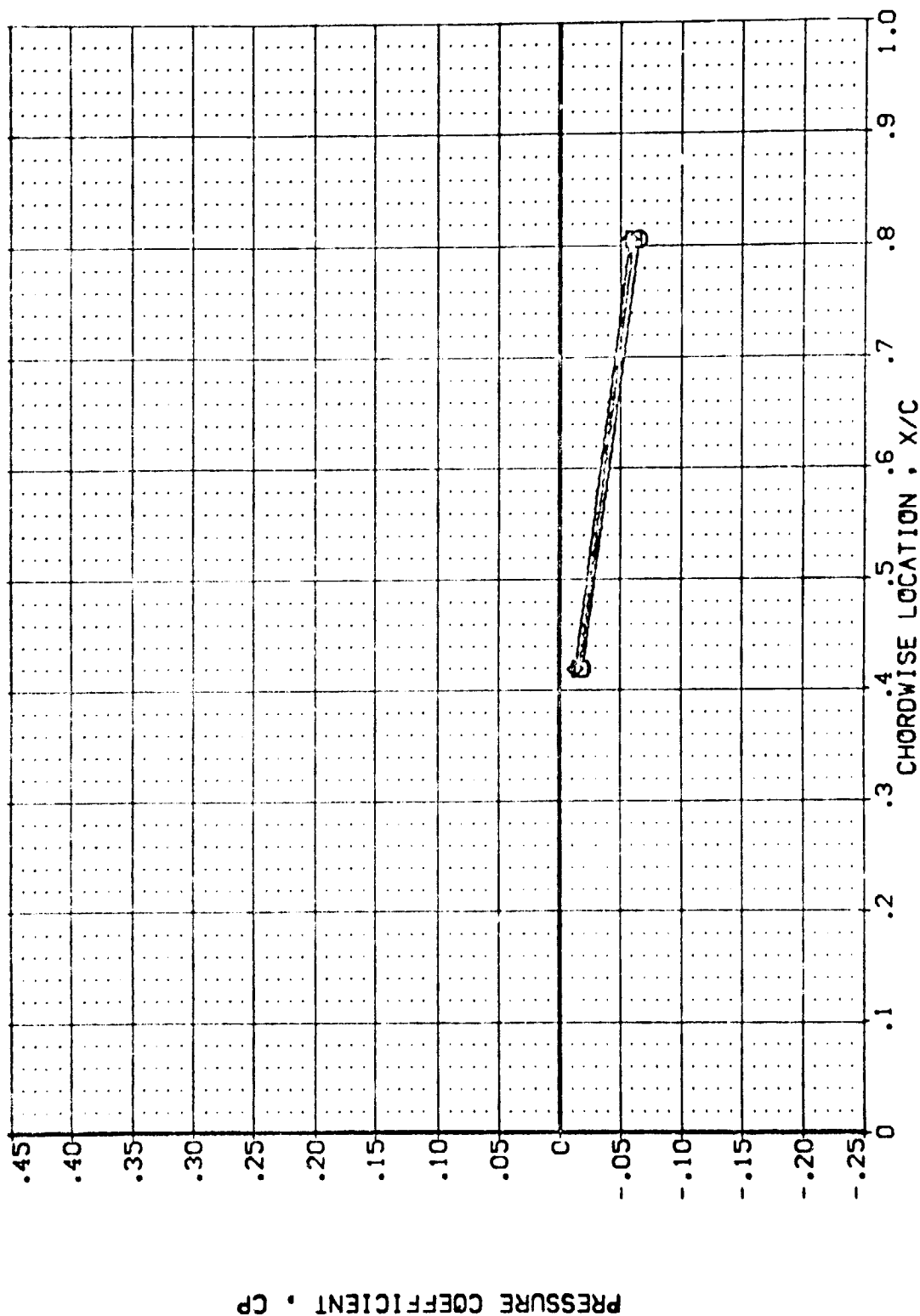
MACH = 2.500 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER DPR SPRR GIMBAL

{LBZ037} AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE .000 14.720 .429 1.000

{LBZ038} AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 31.260 .916 1.000

{LBZ034} AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 31.260 .916 1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .427

DATA SET SYMBOL
(LBZC037)
(LBZC038)
(LBZC039)

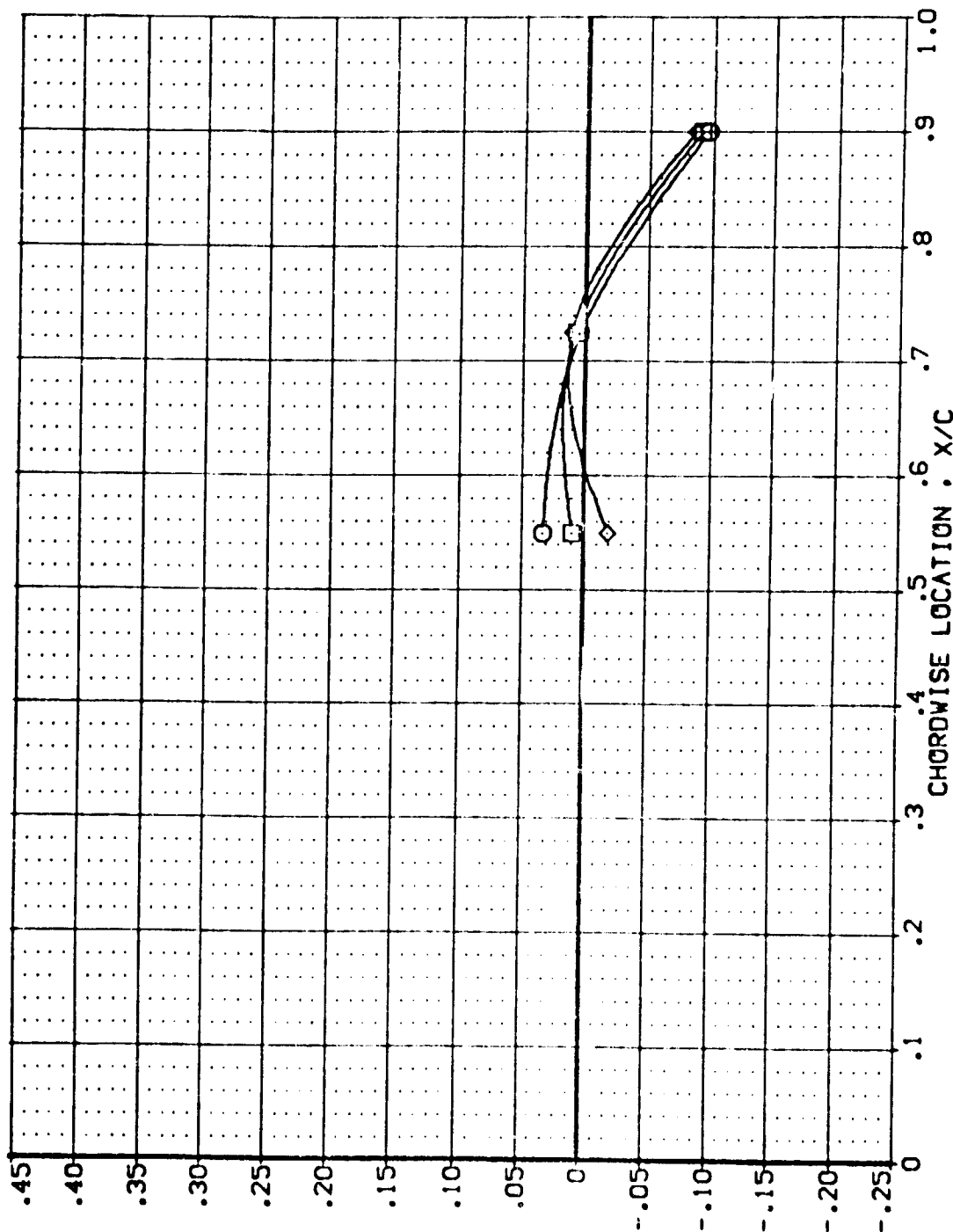
CONFIGURATION DESCRIPTION
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER
.000
1.000
1.000

DPR
14.720
31.260

SRPR
.429
.916

GINBAL
1.000
1.000
1.000



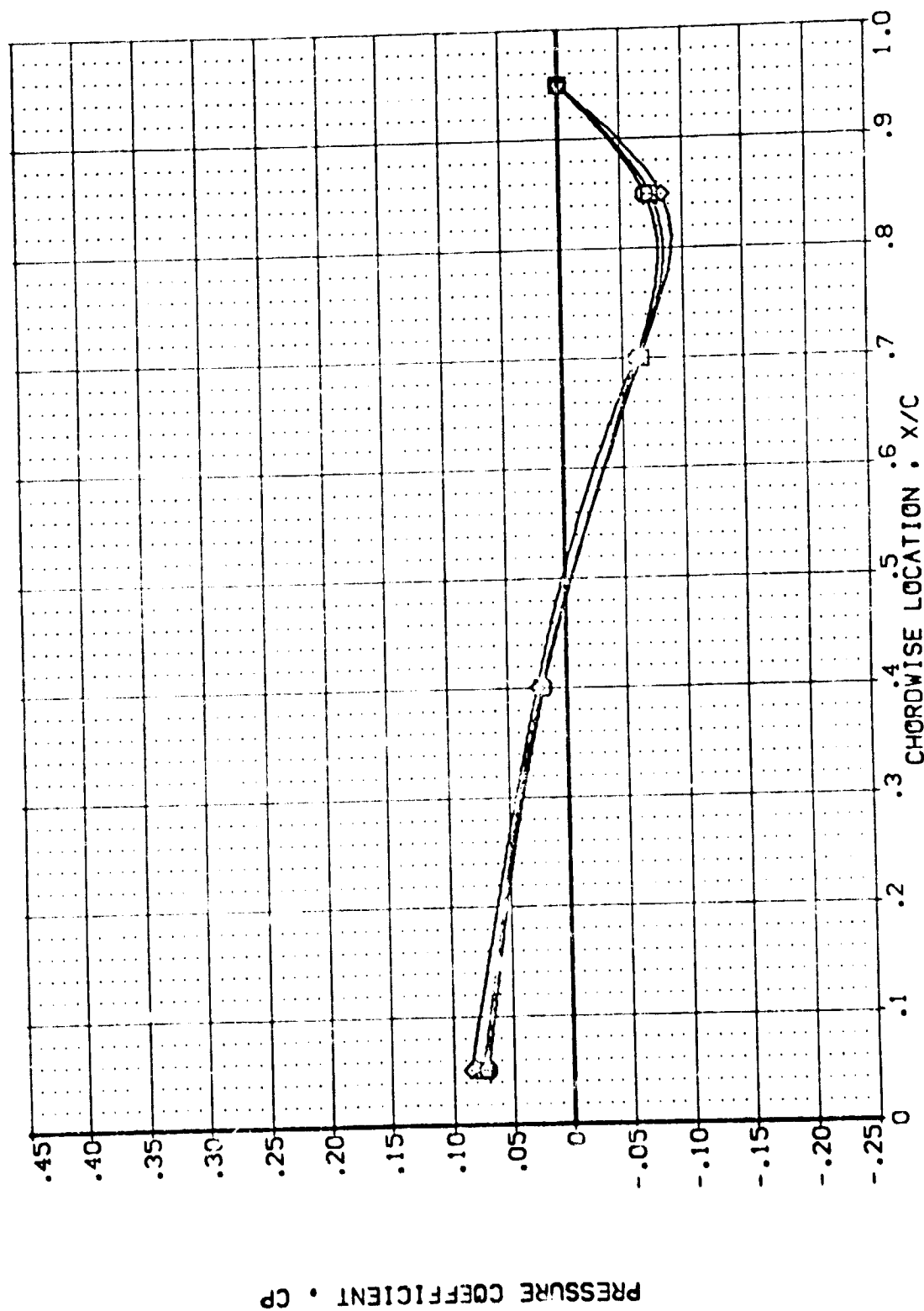
PRESSURE COEFFICIENT, CP

CHORDWISE LOCATION, X/C

PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CPR	SWPR	GIMBAL
(L3007)	AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	.000	14.720	.428	1.000
(LB2005)	AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	1.000	31.260	.916	1.000
(LB2004)	AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	1.000			



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .673

DATA SET SYMBOL

(LB0007)
(LB0008)
(LB0009)

CONFIGURATION DESCRIPTION

AVES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE

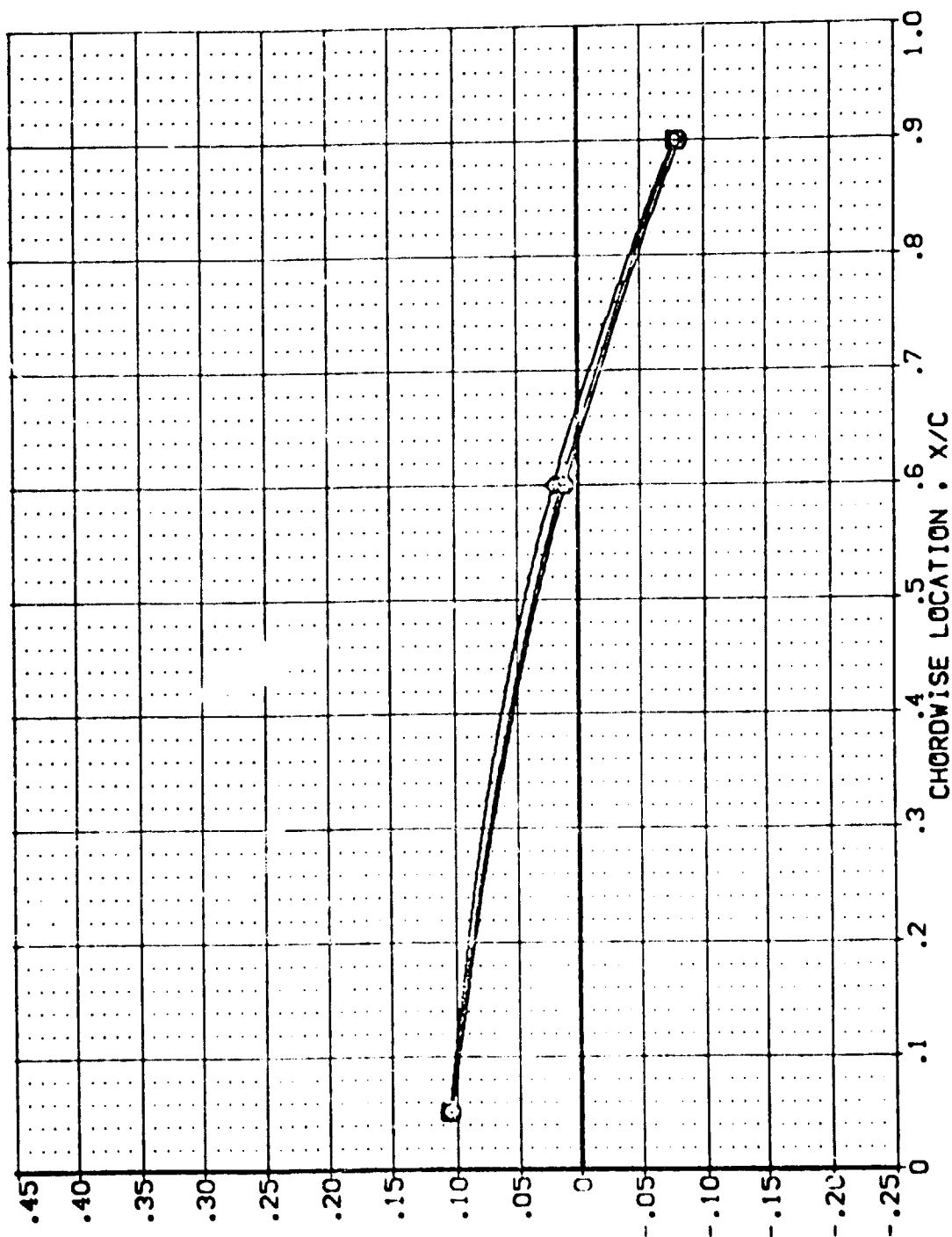
POWER

OPR 14.720
31.260

GINBAL

1.000
1.000
1.000

PRESSURE COEFFICIENT • CP



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

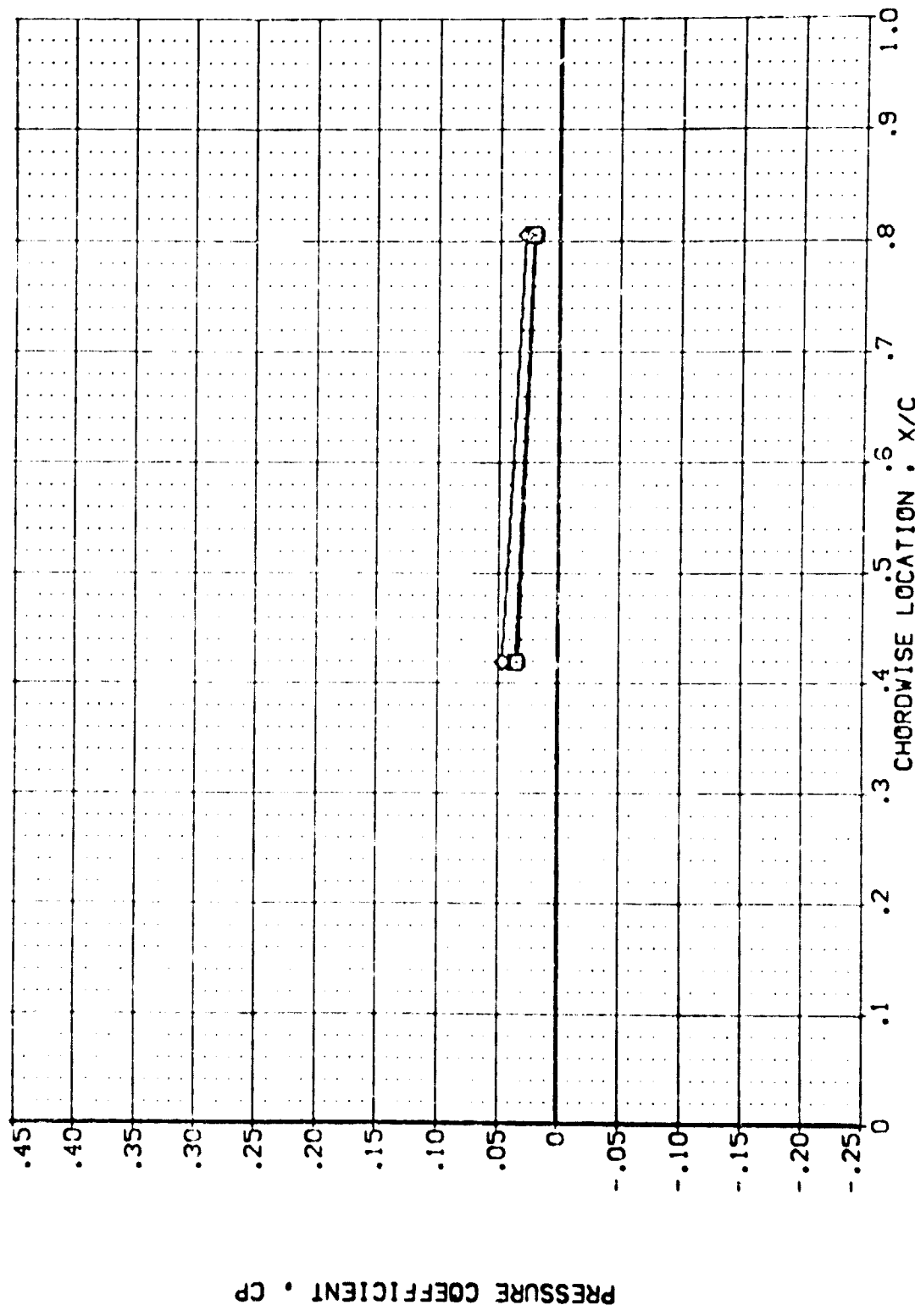
MACH = 2.500 ALPHA = .000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER DPR SMRPR GIMBAL

(LB0037) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE .000 14.720 .429 1.000

(LB0036) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 31.260 .916 1.000

(LB0034) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .427

DATA SET SYMBOL

(LB2007)
(LB2008)
(LB2009)

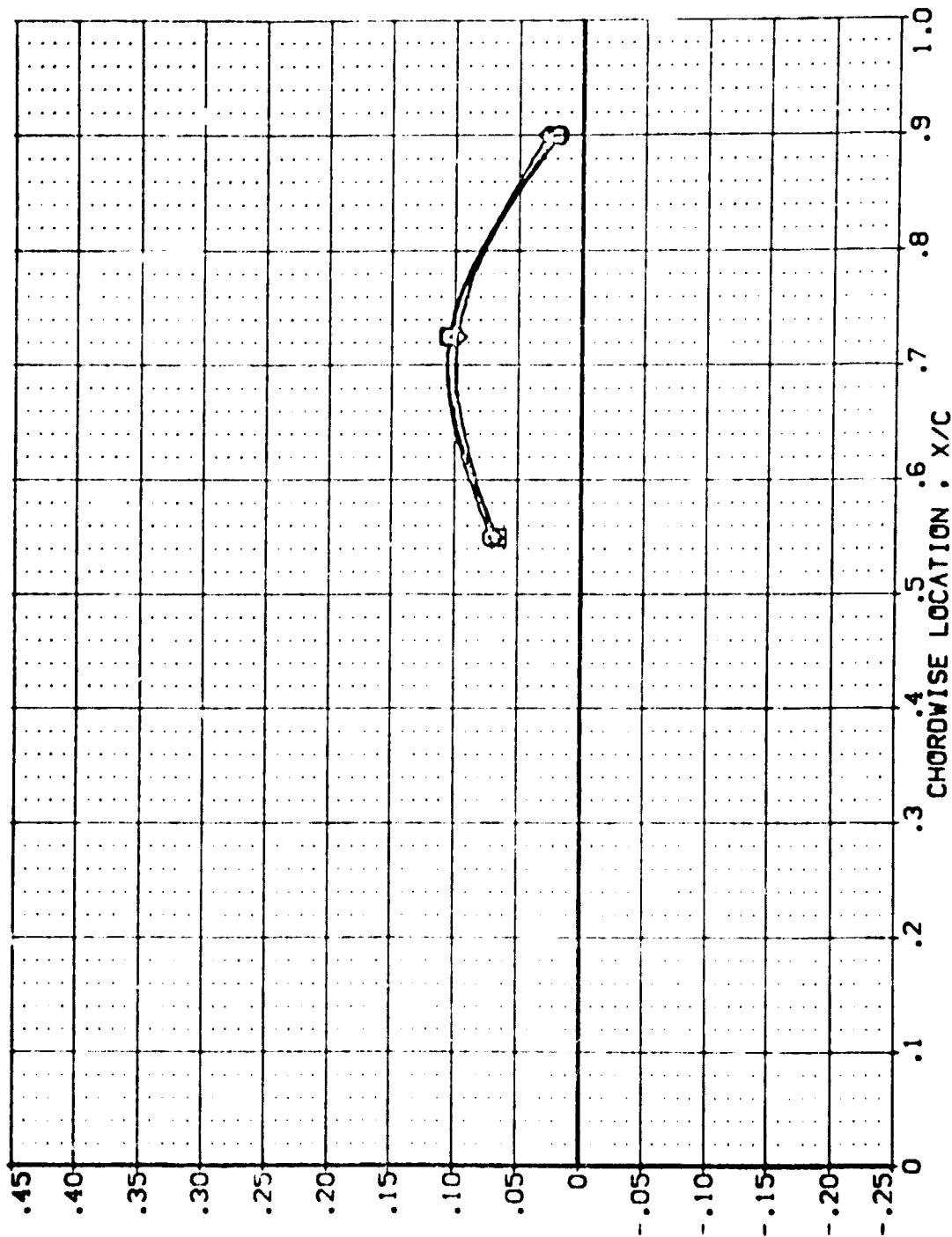
AVES 67-710
AVES 67-710
AVES 67-710

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER C/P SRPR 01MBAL
1.000 14.720 .428 1.000
1.000 31.260 .516 1.000

PRESSURE COEFFICIENT, CP

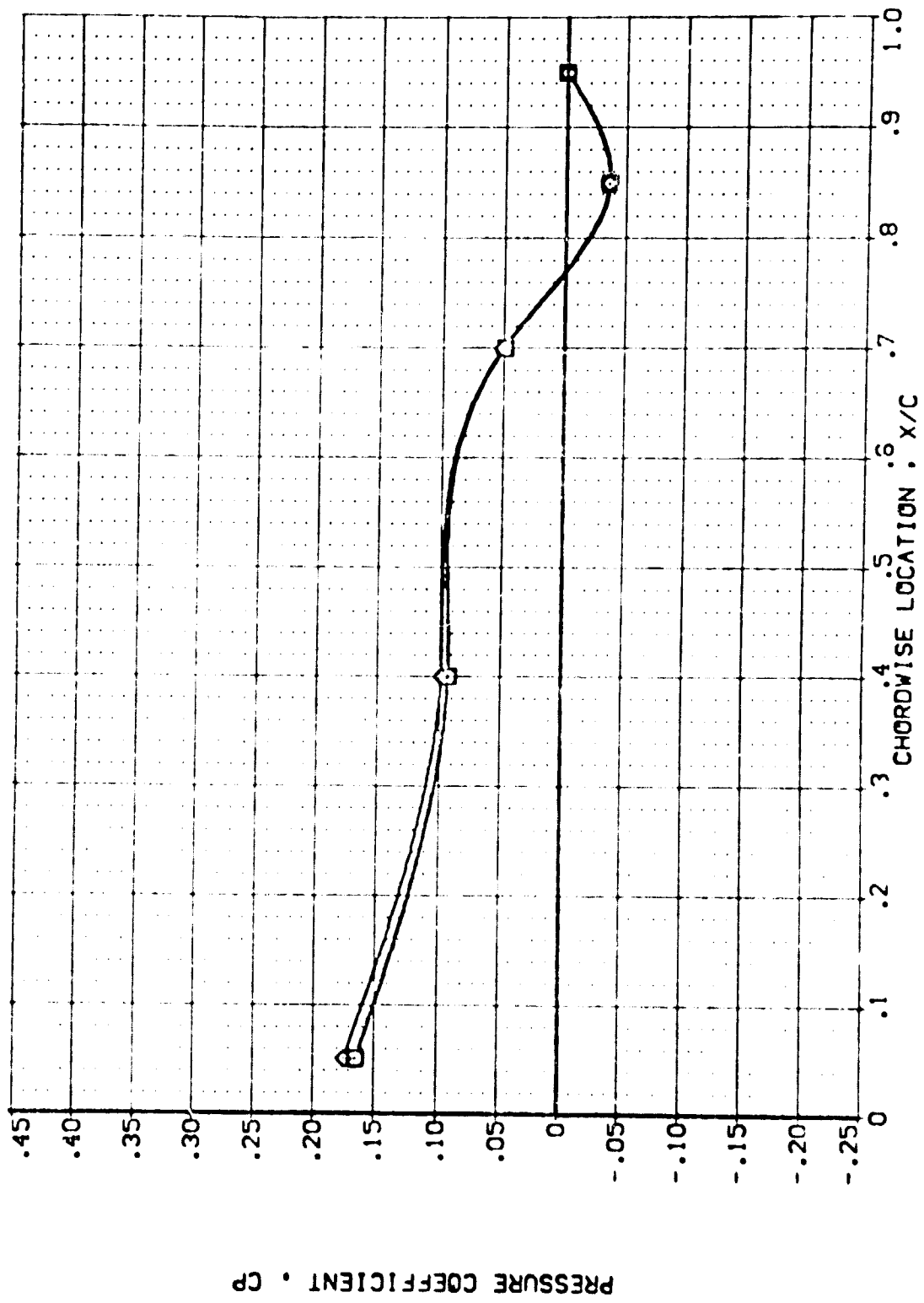


PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .534

DATA SET SYMBOL: (LB7007) (LB7005) (LB7004)

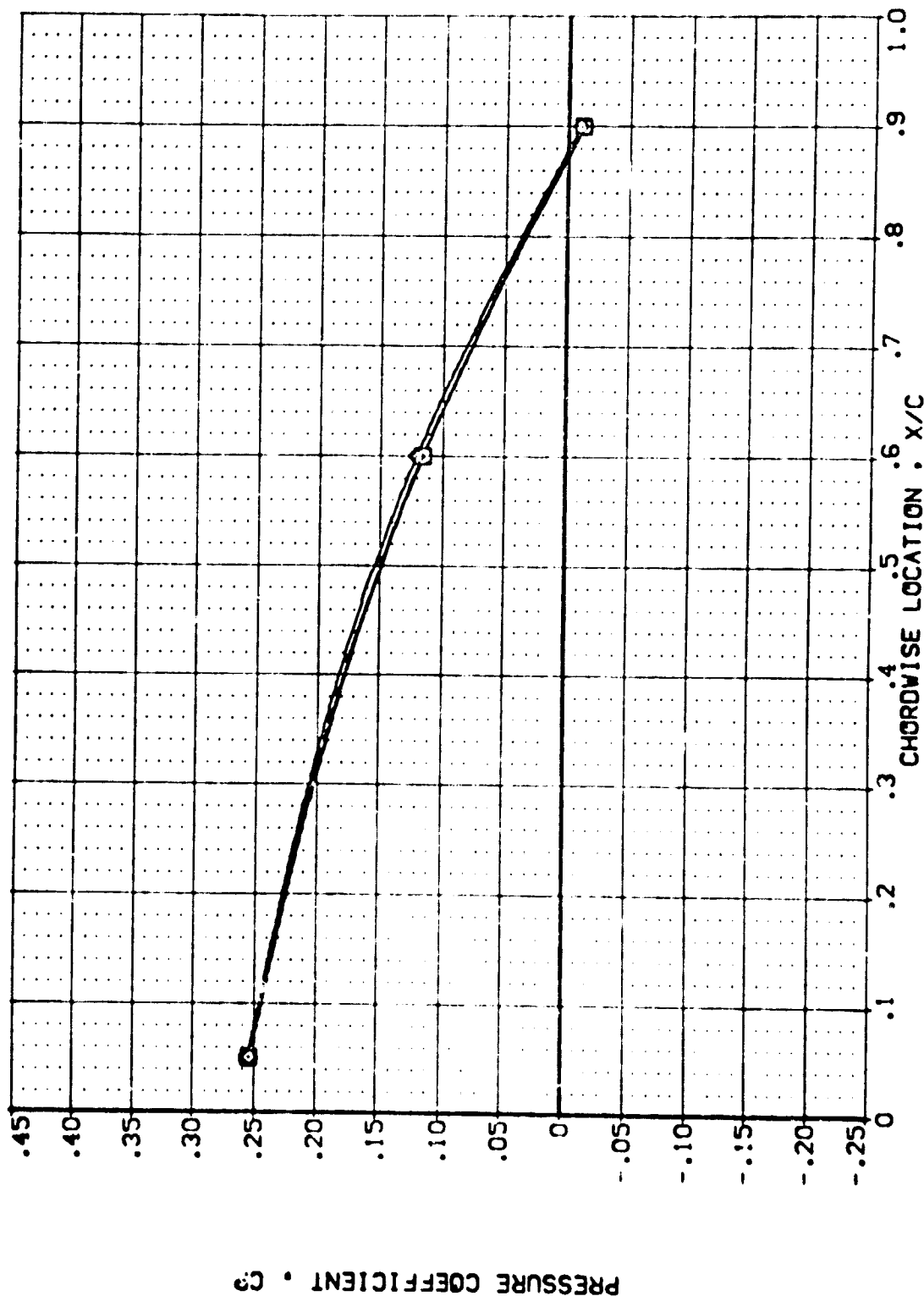
CONFIGURATION DESCRIPTION				POWER	OPR	SDPR	QINBAL
AWES 87-710	IA12C 01	T1	SI	LOWER WING PRESSURE	.000	14.720	1.000
AWES 87-710	IA12C 01	T1	SI	LOWER WING PRESSURE	1.000	.429	1.000
AWES 87-710	IA12C 01	T1	SI	LOWER WING PRESSURE	1.000	31.260	1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZ007) AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ008) AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ009) AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER DFR SDFR GIMBAL
 .000 14.720 .429 1.000
 1.000 31.260 .916 1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

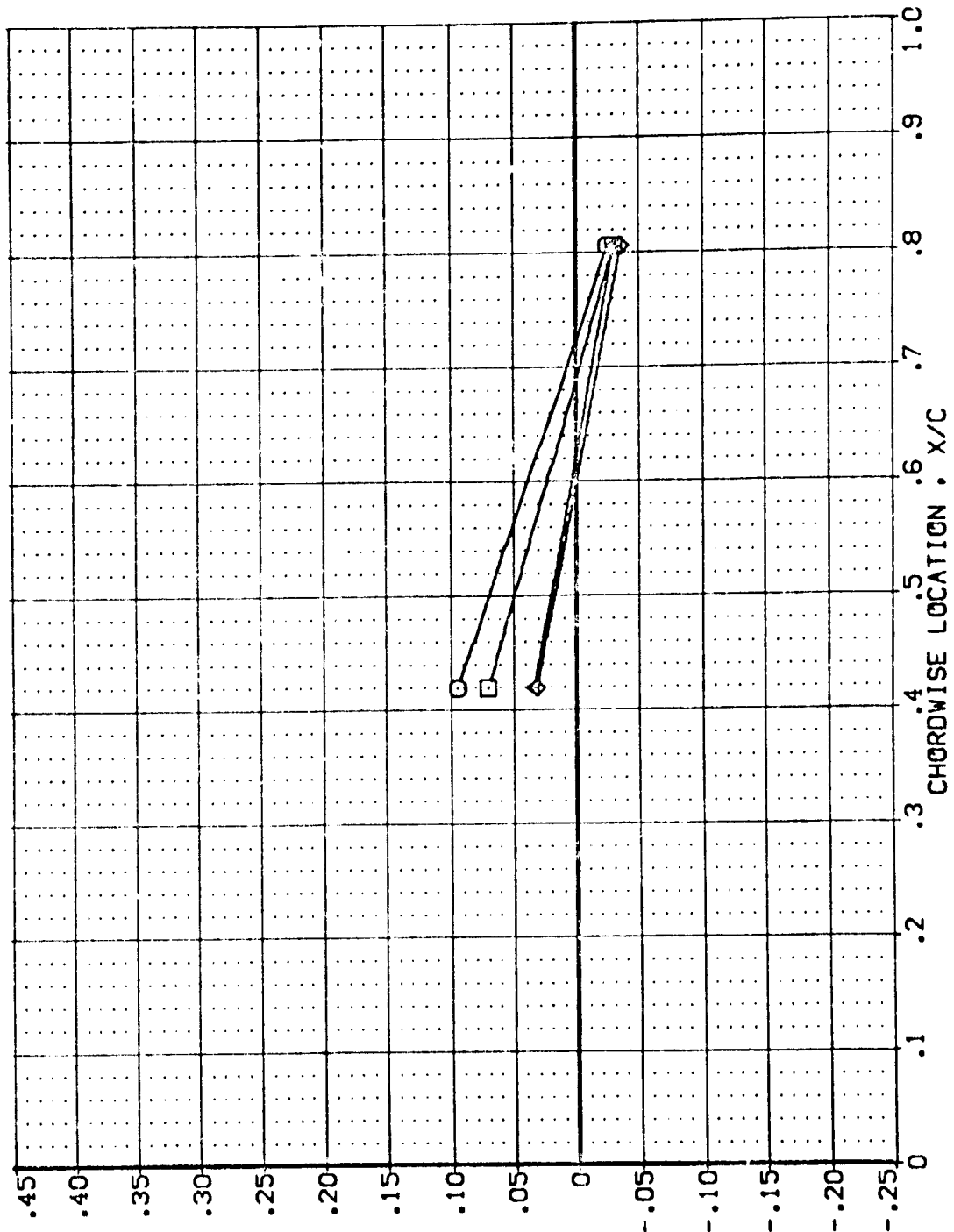
MACH = 2.500 ALPHA = 6.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB2008)	AVES 87-710	IA12C 01	T1	SI	LOWER WING PRESSURE
(LB2042)	AVES 87-710	IA12C 01	T1	SI	LOWER WING PRESSURE
(LB2041)	AVES 87-710	IA12C 01	T1	SI	LOWER WING PRESSURE
(LB2045)	AVES 87-710	IA12C 01	T1	SI	LOWER WING PRESSURE

POWER DPR SDRR GIMBAL

.000	14.400	.412	1.000
1.000	26.800	.788	1.000
1.000	41.000	1.150	1.000

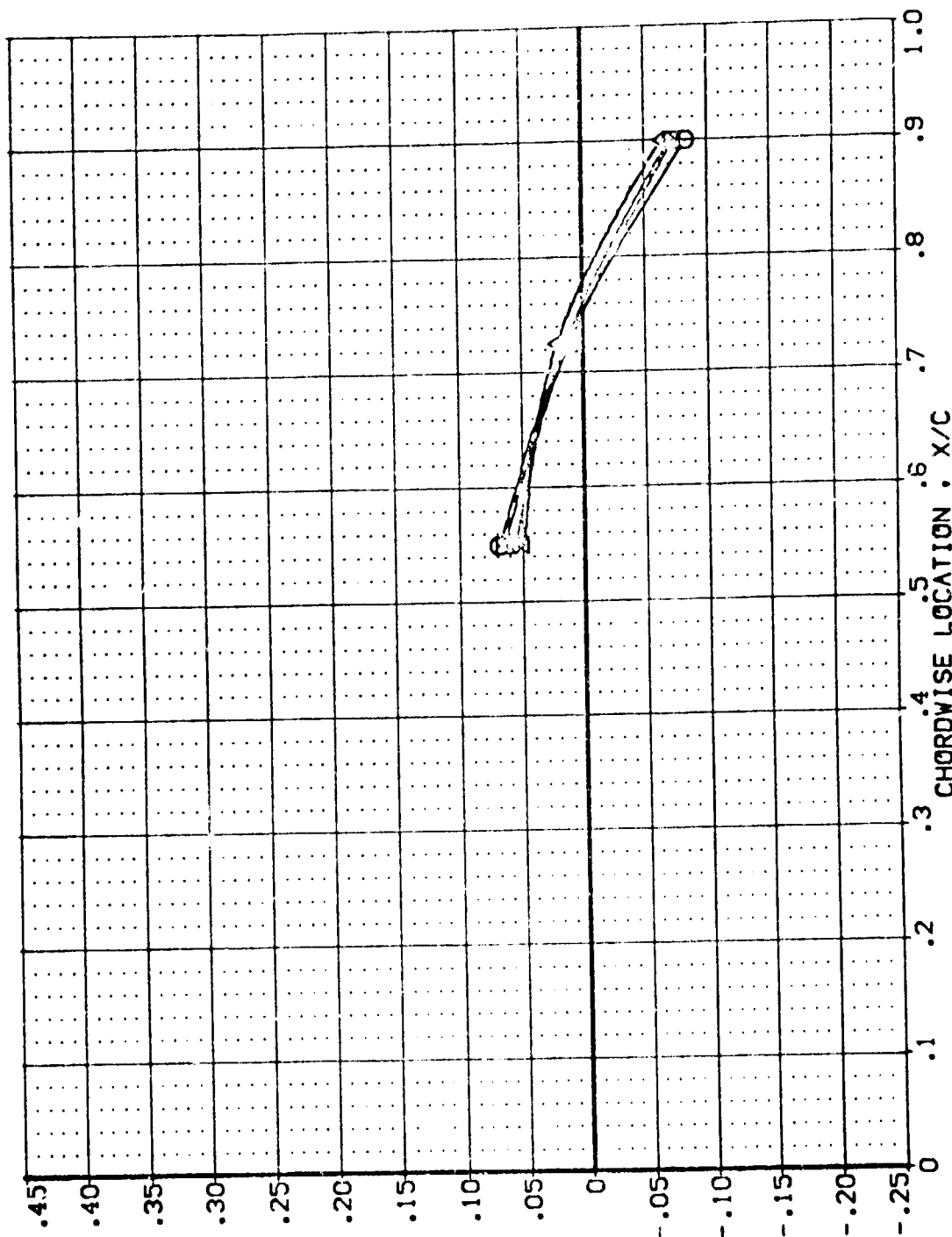


PRESSURE COEFFICIENT : CP

PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

DATA SET SYMBOL:  CONFIGURATION DESCRIPTION:
 (LBZ038) ASES 87-710 IA12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ042) ASES 87-710 IA12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ041) ASES 87-710 IA12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ045) ASES 87-710 IA12C 01 T1 S1 LOWER WING PRESSURE

POWER: .000
 CDR: 14.400
 SMR: .412
 GIMBAL: 1.000
 1.000
 1.000
 1.000
 1.000



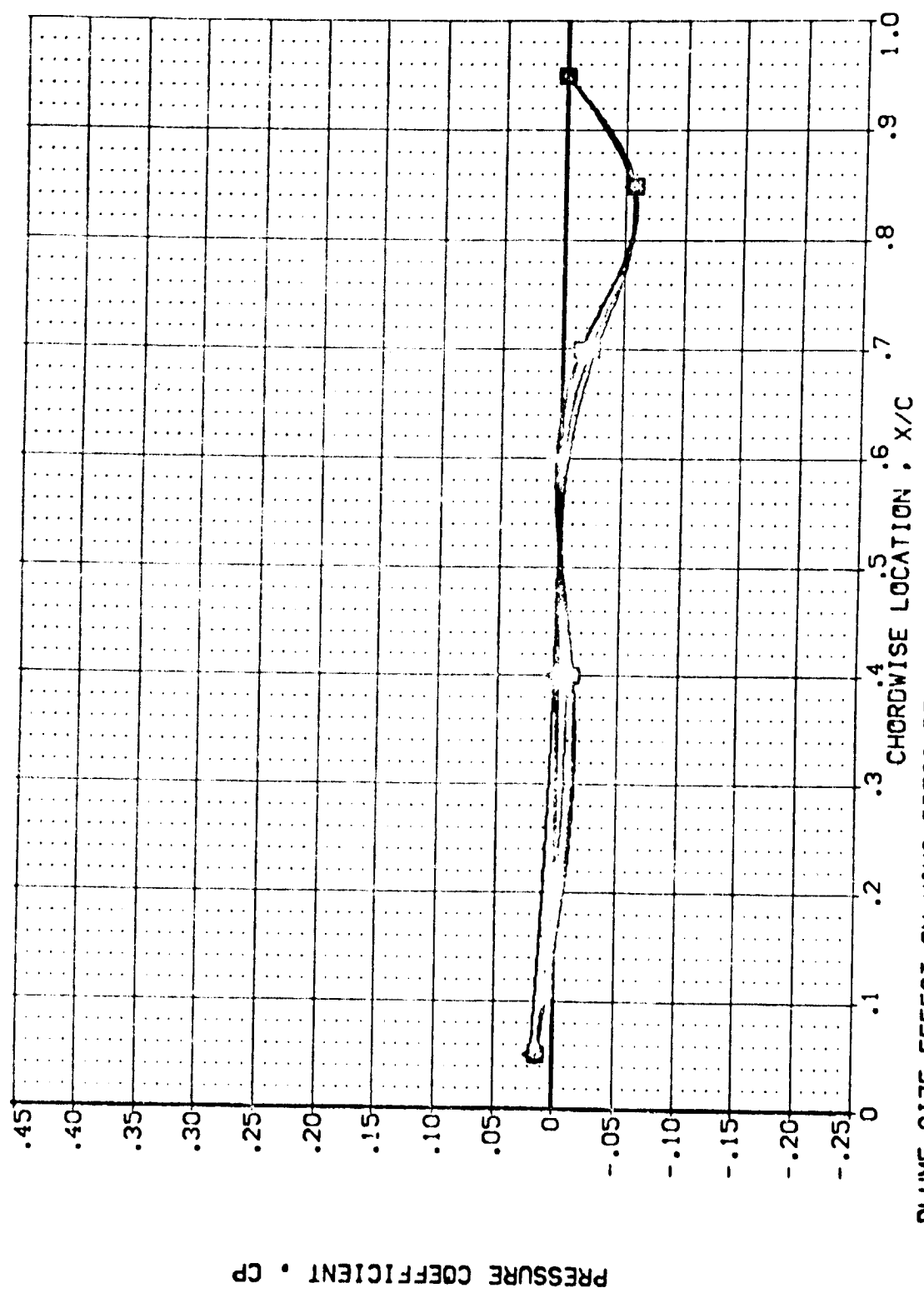
PRESSURE COEFFICIENT, CP

CHORDWISE LOCATION, X/C

PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SR-PR	GINBAL
(LBZ039)	AVES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE	.000	14.400	.412	1.000
(LBZ042)	AVES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE	.000	26.800	.708	1.000
(LBZ041)	AVES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE	.000	41.000	1.150	1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL

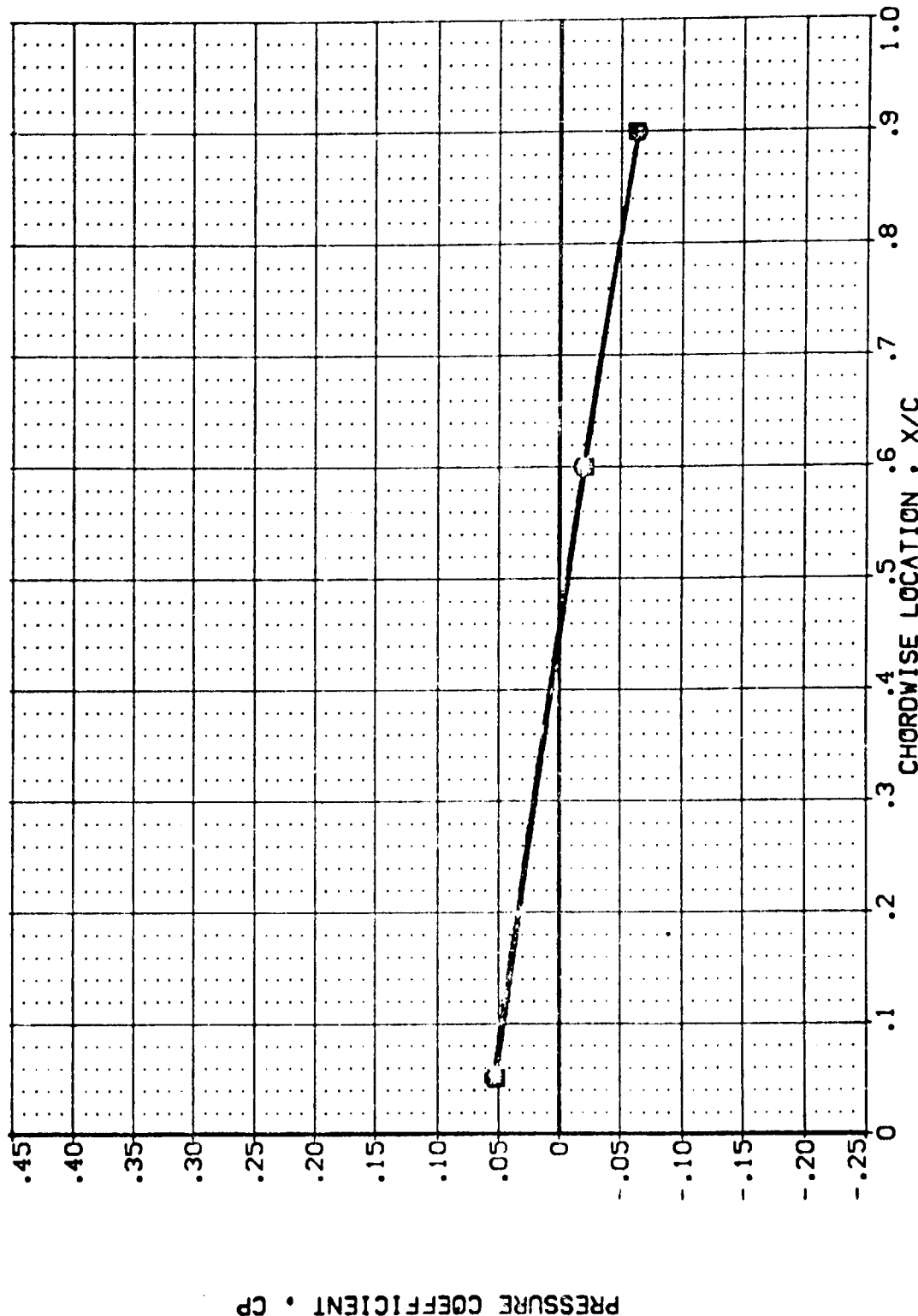
(LBZ038)
(LBZ042)
(LBZ041)
(LBZ043)

CONFIGURATION DESCRIPTION
AVES 87-710
AVES 87-710
AVES 87-710

POWER
1.000
1.000
1.000

59-FR
.412
.768
1.150

GIMBAL
1.000
1.000
1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

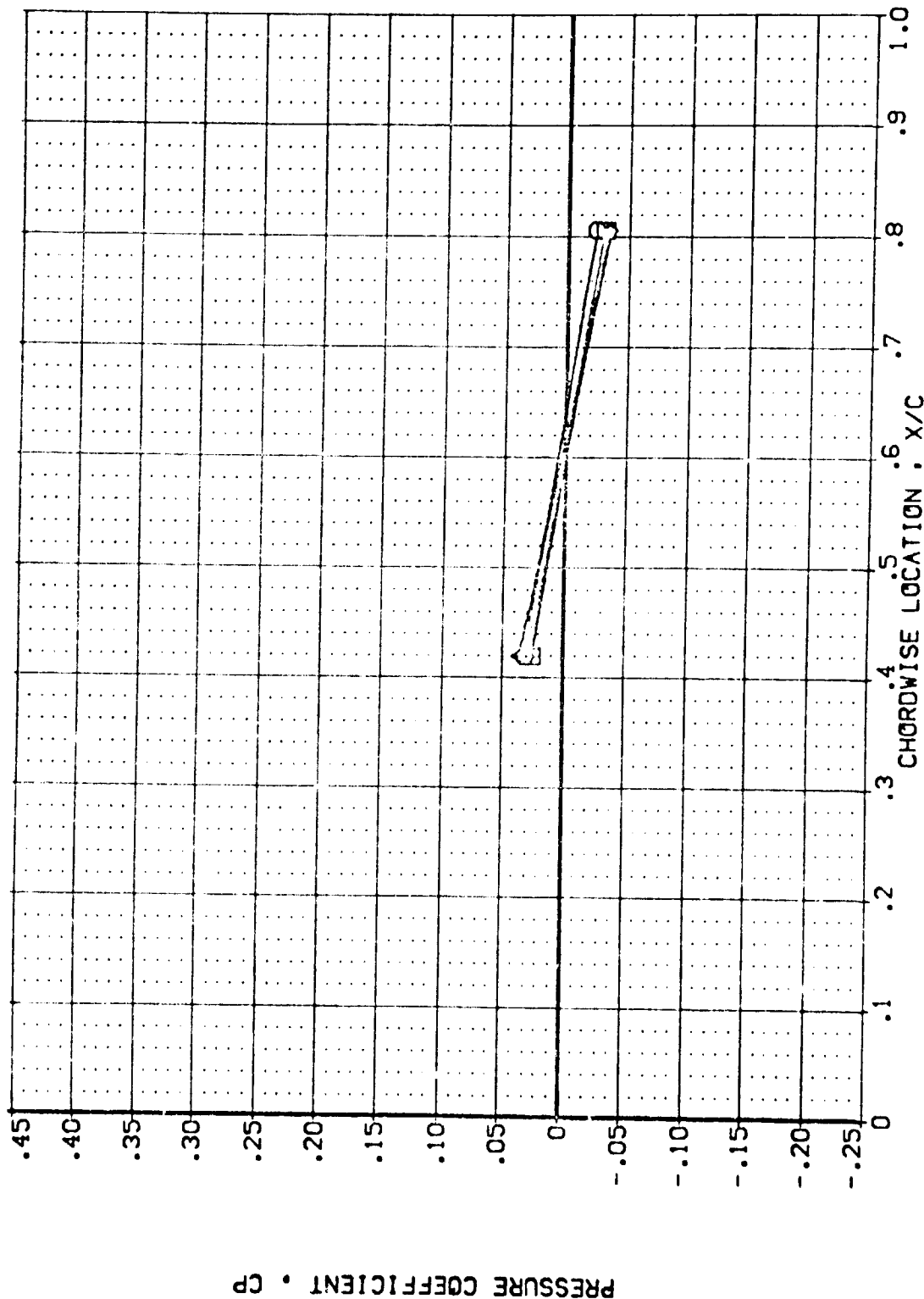
MACH = 3.000 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL

(LBZ038)
(LBZ042)
(LBZ041)
(LBZ045)

CONFIGURATION DESCRIPTION
AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER DFR SVPR GIMBAL
.000 14.400 .412 1.000
1.000 26.630 .768 1.000
1.000 41.000 1.150 1.000



PRESSURE COEFFICIENT • CP

PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

POWER QFR SFRPR GIMBAL

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

(LBZ038)
(LBZ042)
(LBZ041)
(LBZ045)

AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

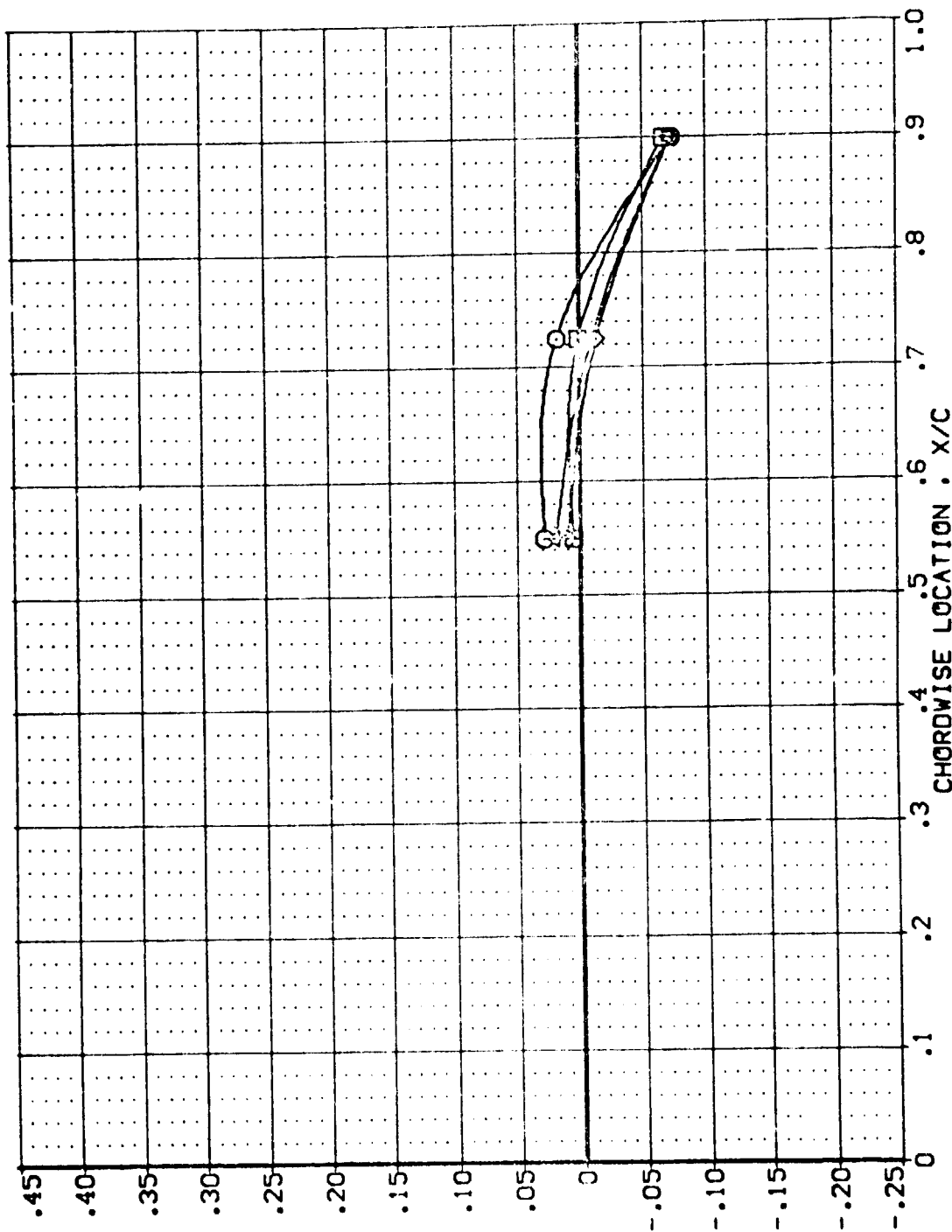
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

PRESSURE COEFFICIENT - CP



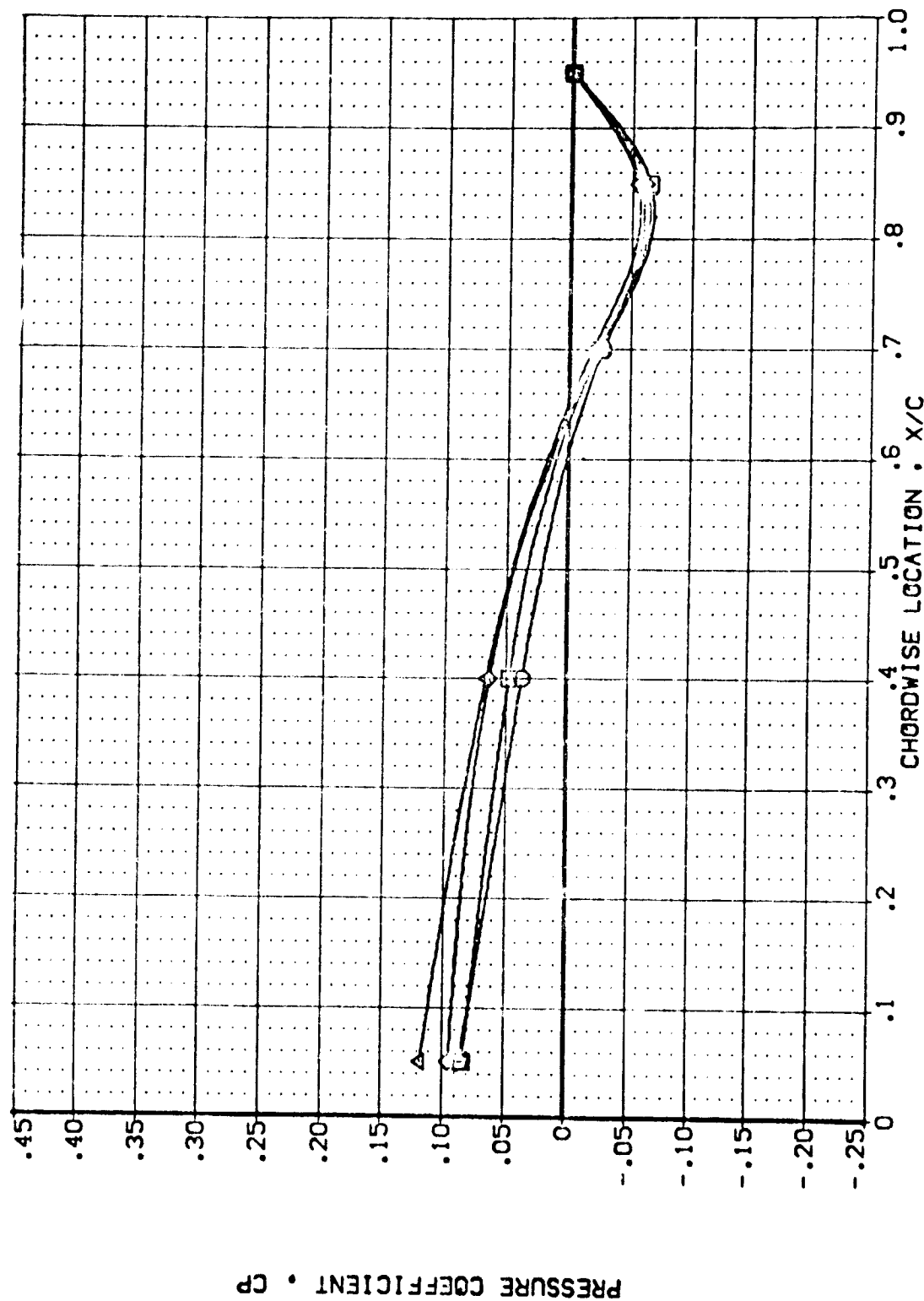
PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .534

(LBZ038)
(LBZ042)
(LBZ041)
(LBZ045)

CONFIGURATION	DESCRIPTION
APES 87-710	1A12C 01 T1 S1
APES 87-710	1A12C 01 T1 S1
APES 87-710	1A12C 01 T1 S1
APES 87-710	1A12C 01 T1 S1

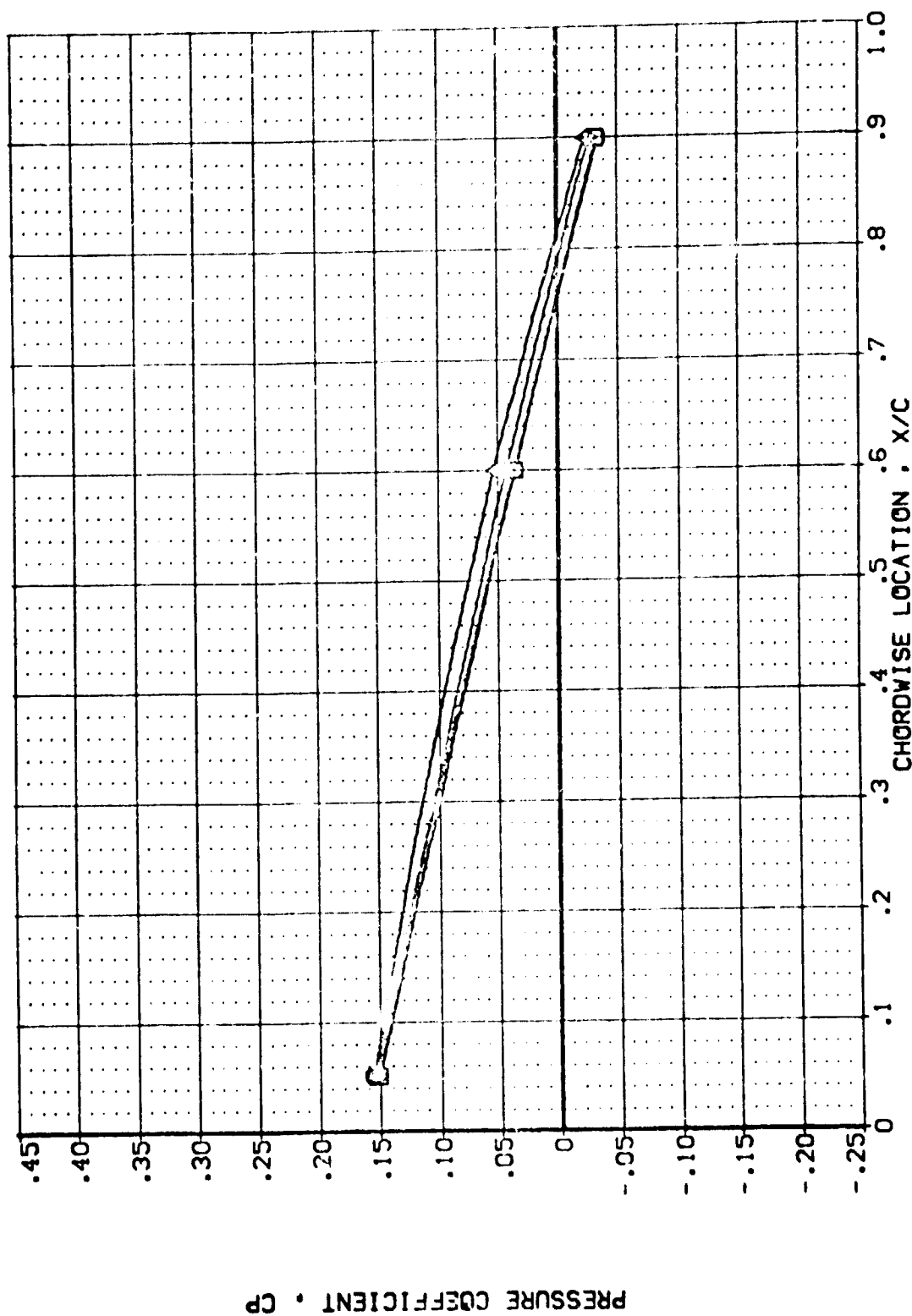
POWER	OPR	SEPR	GINBAL
1,000	14,400	.412	1,000
1,000	26,870	.789	1,000
1,000	41,000	1.150	1,000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .673

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SEPR	GIMBAL
(LB2008)	AMES 87-710	.000	14.400	.412	1.000
(LB2042)	AMES 87-710	1.000	26.000	.768	1.000
(LB2041)	AMES 87-710	1.000	41.000	1.150	1.000
(LB2043)	AMES 87-710	1.000			



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .887

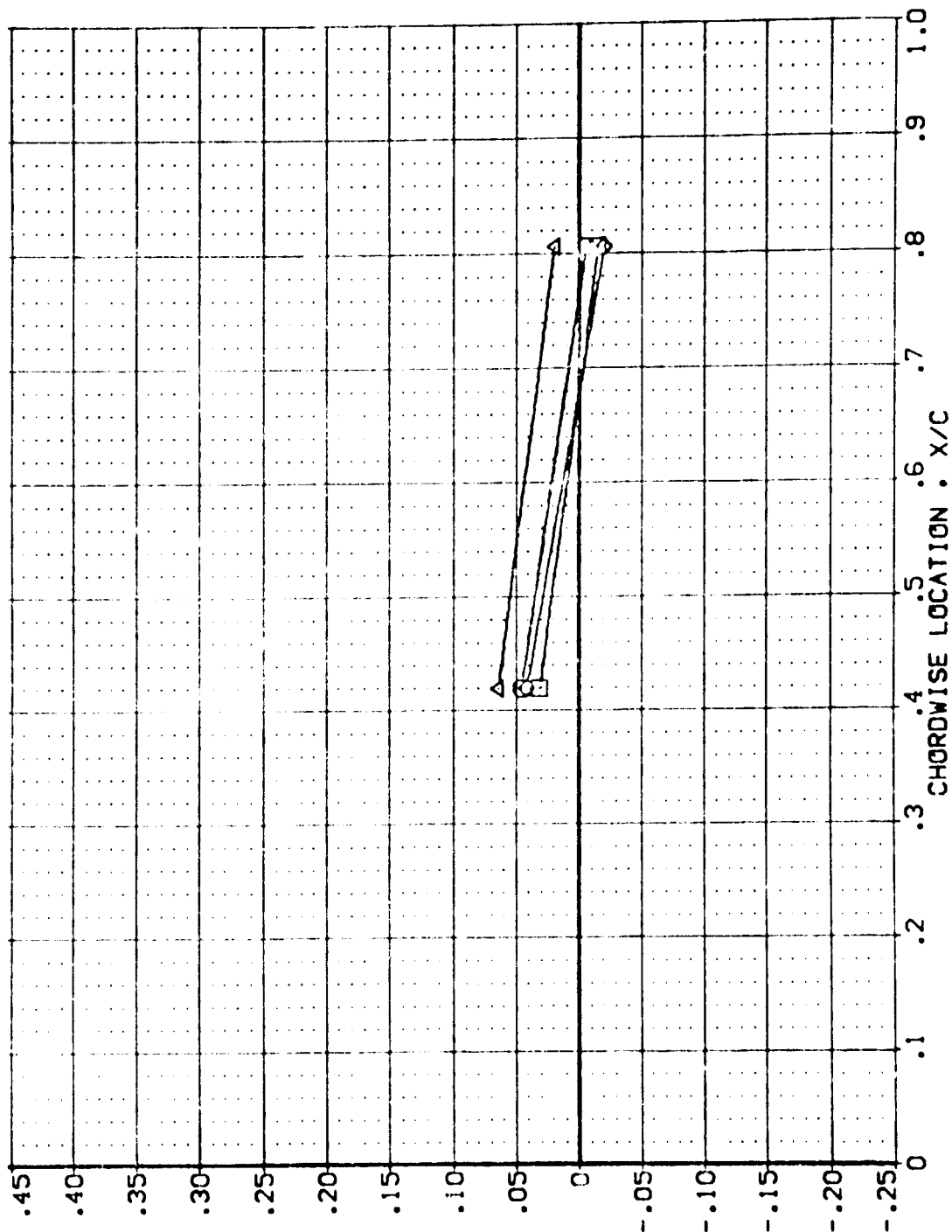
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SPRR GIMBAL

(LBZD38) ASES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE 1.000 14.400 .412 1.000

(LBZD42) ASES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE 1.000 26.000 .738 1.000

(LBZD41) ASES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE 1.000 41.000 1.150 1.000

(LBZD45) ASES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE 1.000 41.000 1.150 1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .427

DATA SET SYMBOL

(LB2038)
(LB2042)
(LB2041)
(LB2045)

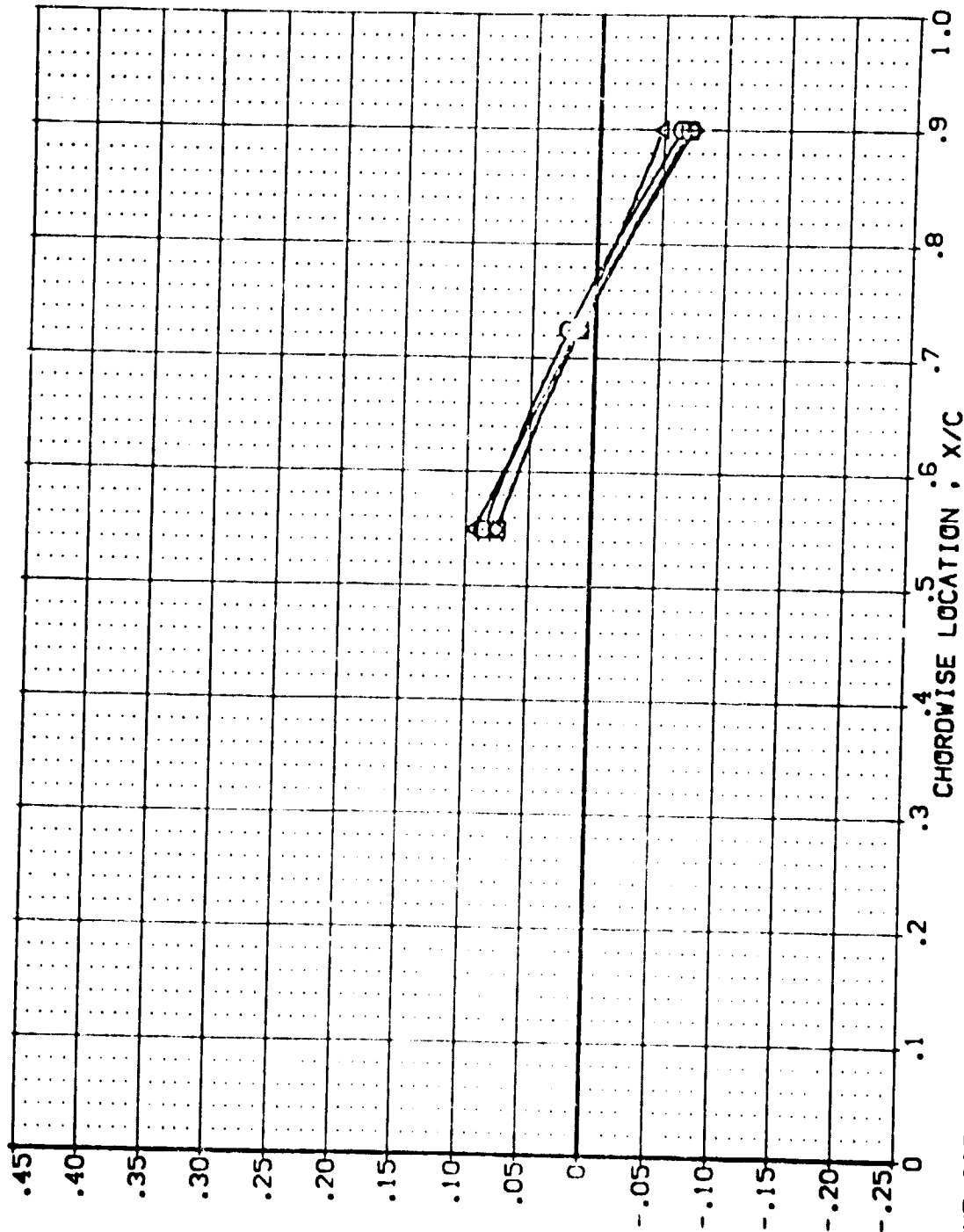
CONFIGURATION DESCRIPTION

AVES 87-710 IAI2C OI TI SI
AVES 87-710 IAI2C OI TI SI
AVES 87-710 IAI2C OI TI SI
AVES 87-710 IAI2C OI TI SI

POWER DPR SR-PR GIMBAL
.000 14.400 .412 1.000
1.000 26.650 .769 1.000
1.000 41.000 1.150 1.000

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

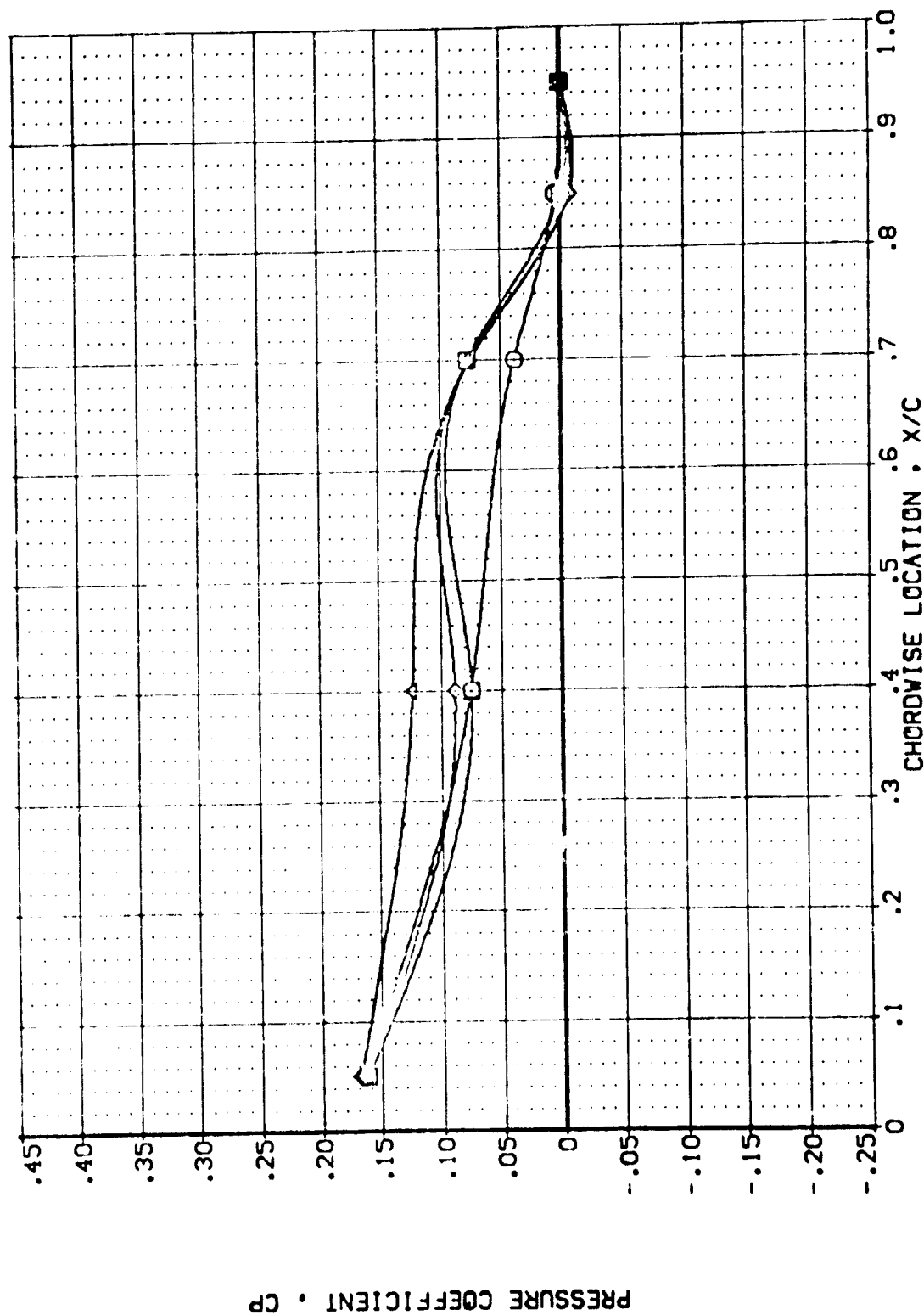
PRESSURE COEFFICIENT, CP



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	DPR	SPRPR	GIMBAL
(LB7008)	AMES 87-710 [A12C 0] T1 S1	.000	14,400	.412	1.000
(LB7042)	AMES 87-710 [A12C 0] T1 S1	1.000	26,800	.758	1.000
(LB7041)	AMES 87-710 [A12C 0] T1 S1	1.000	41,000	1.150	1.000
(LB7045)	AMES 87-710 [A12C 0] T1 S1	1.000			



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ008)
(LBZ042)
(LBZ041)
(LBZ045)

AWES 87-710
AWES 87-710
AWES 87-710
AWES 87-710

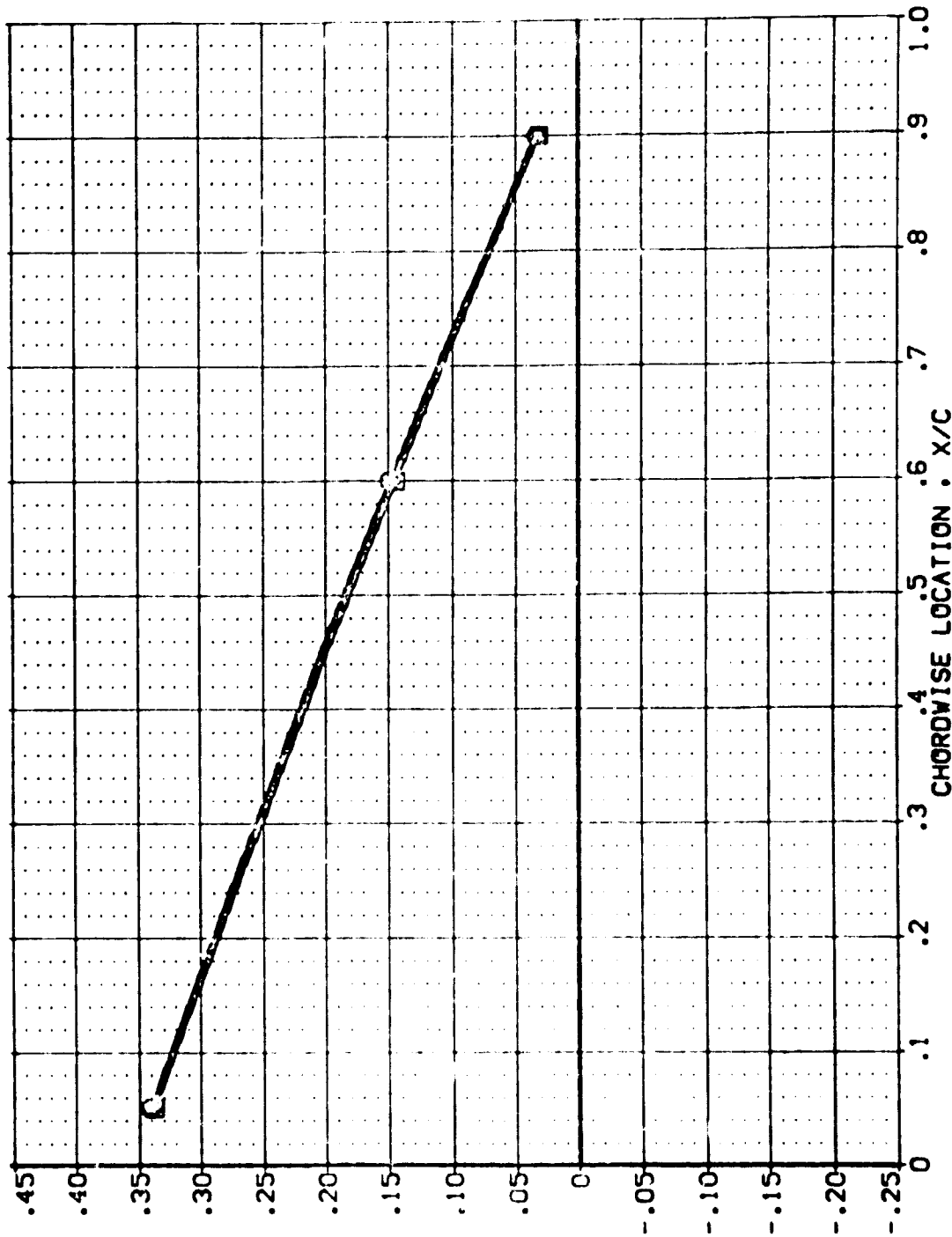
POWER
.000
1.000
1.000
1.000

SPWR
.412
.768
1.150

GIMBAL
1.000
1.000
1.000
1.000

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

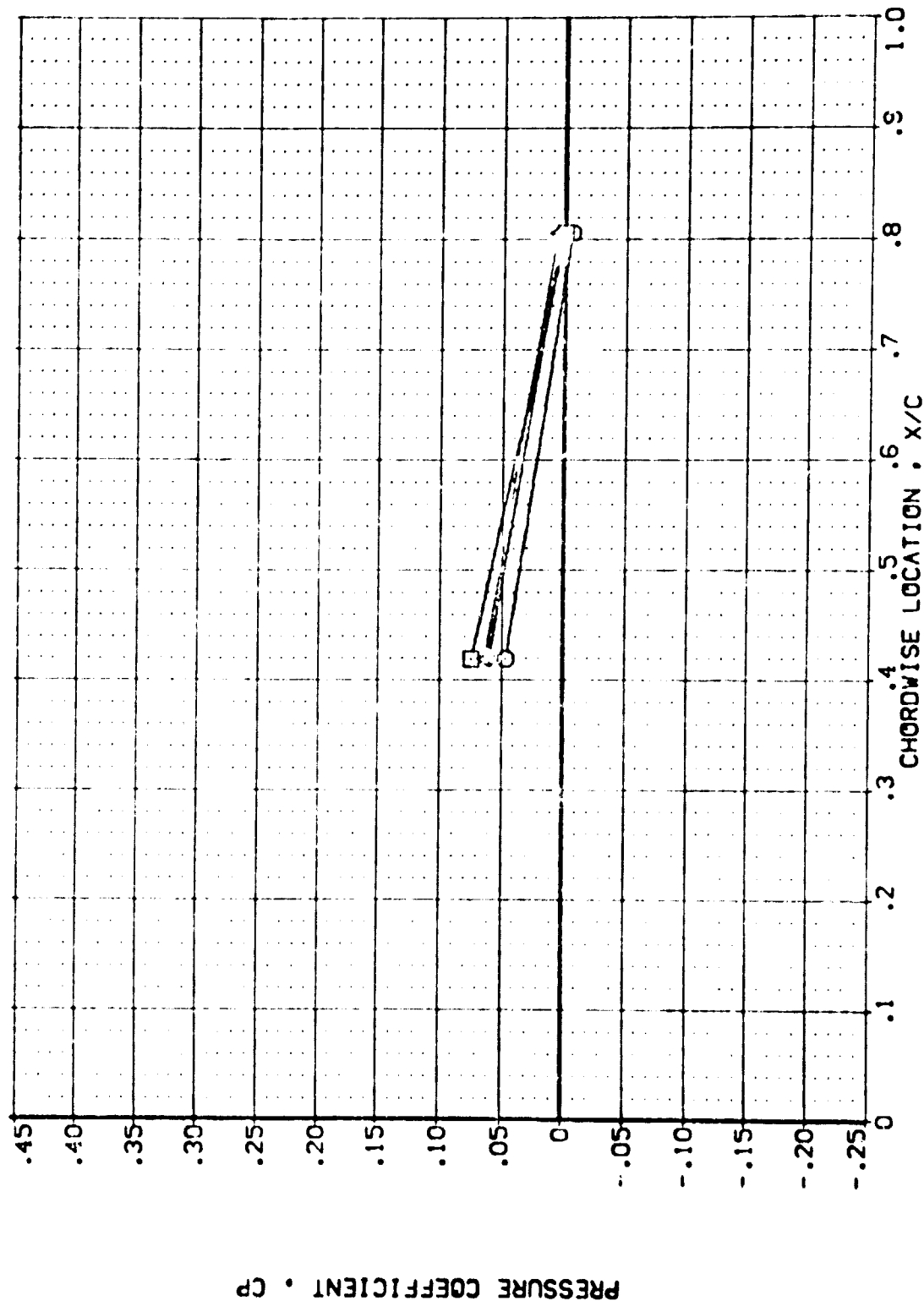
DPR
14.400
26.800
41.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SRPR	QINBAL
(LB7046)	AMES 87-710 [A] 2C 01 T1 S1	.000	13.170	.456	1.000
(LB7049)	AMES 87-710 [A] 2C 01 T1 S1	1.000	23.670	.876	1.000
(LB7050)	AMES 87-710 [A] 2C 01 T1 S1	1.000	41.000	1.150	1.000
(LB7053)	AMES 87-710 [A] 2C 01 T1 S1	1.000			



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL
(LB7046)
(LB7049)
(LB7050)
(LB7053)

CONFIGURATION DESCRIPTION
AES 87-710
AES 87-710
AES 87-710
AES 87-710

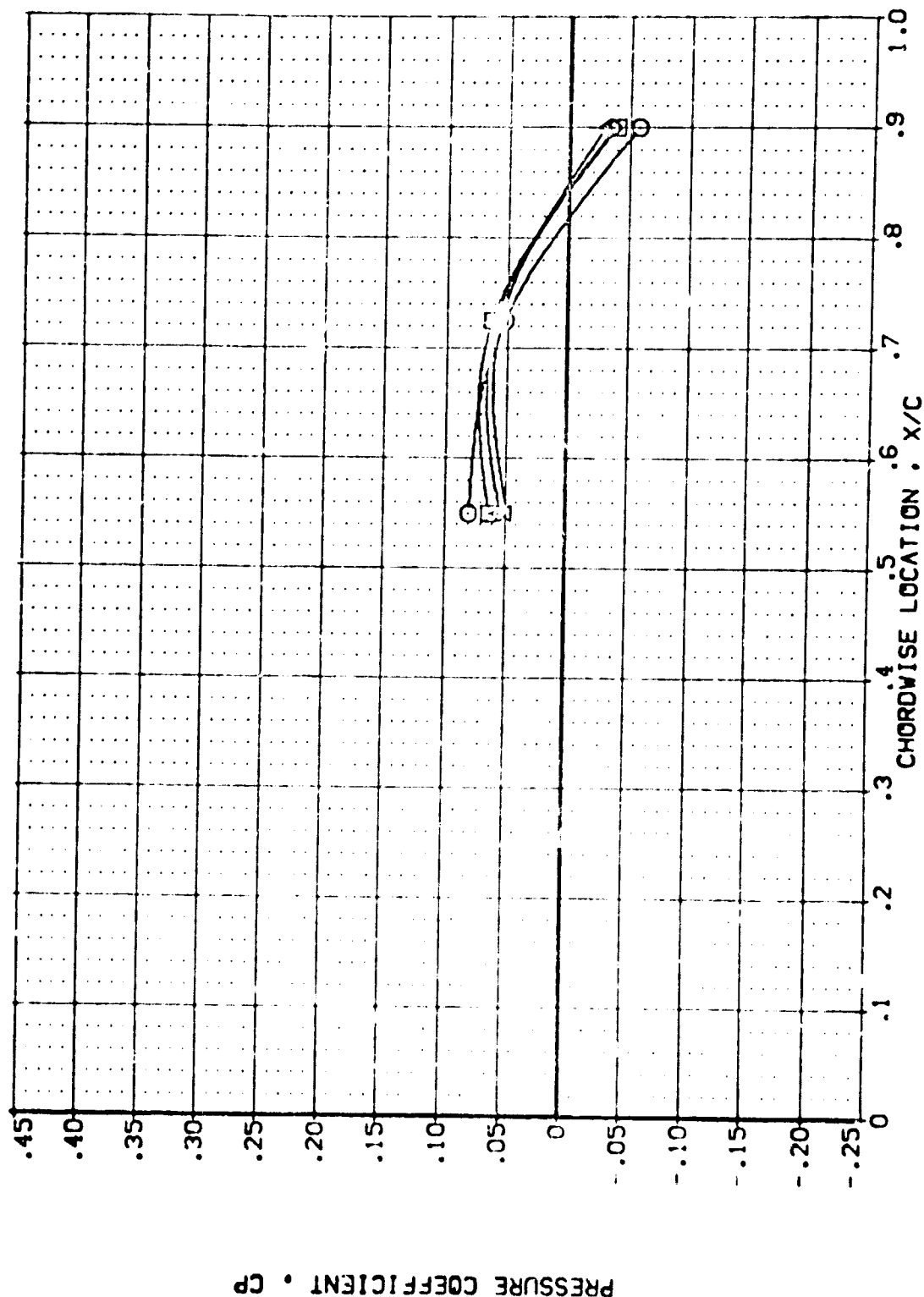
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER
.000
1.000
1.000
1.000

OPR
13.170
23.860
41.200

STPR
.456
.876
1.150

GINBAL
1.000
1.000
1.000

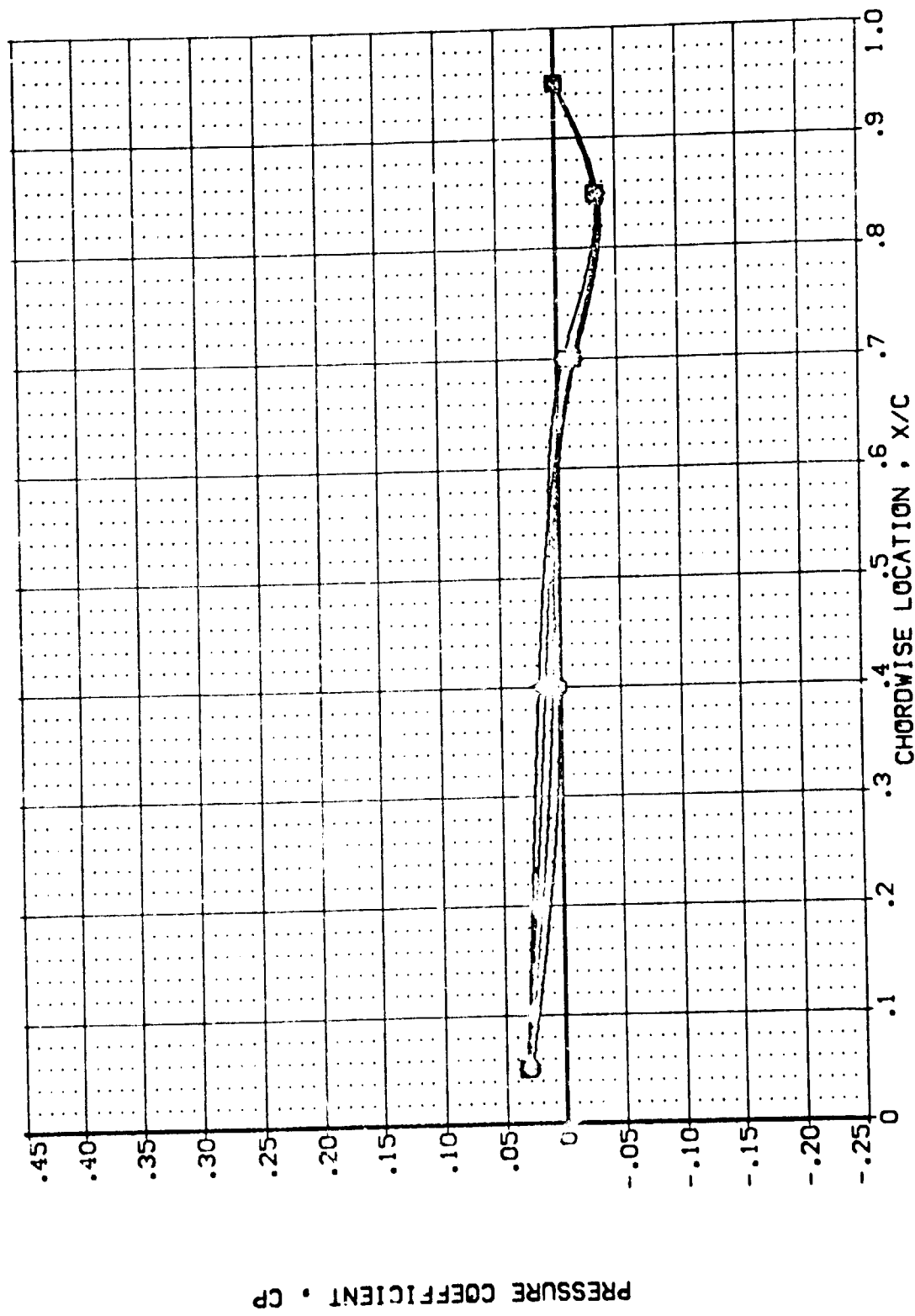


PRESSURE COEFFICIENT • CP

PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	DPR	SOPR	GIMBAL
(LBZ046)	AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	.000	13.170	.456	1.000
(LBZ045)	AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LBZ050)	AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	1.000	41.000	1.150	1.000
(LBZ053)					



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL

(LB2046)
(LB2049)
(LB2050)
(LB2053)

CONFIGURATION DESCRIPTION
AMES 87-710 IAI2C 01 T1 S1
AMES 87-710 IAI2C 01 T1 S1
AMES 87-710 IAI2C 01 T1 S1
AMES 87-710 IAI2C 01 T1 S1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

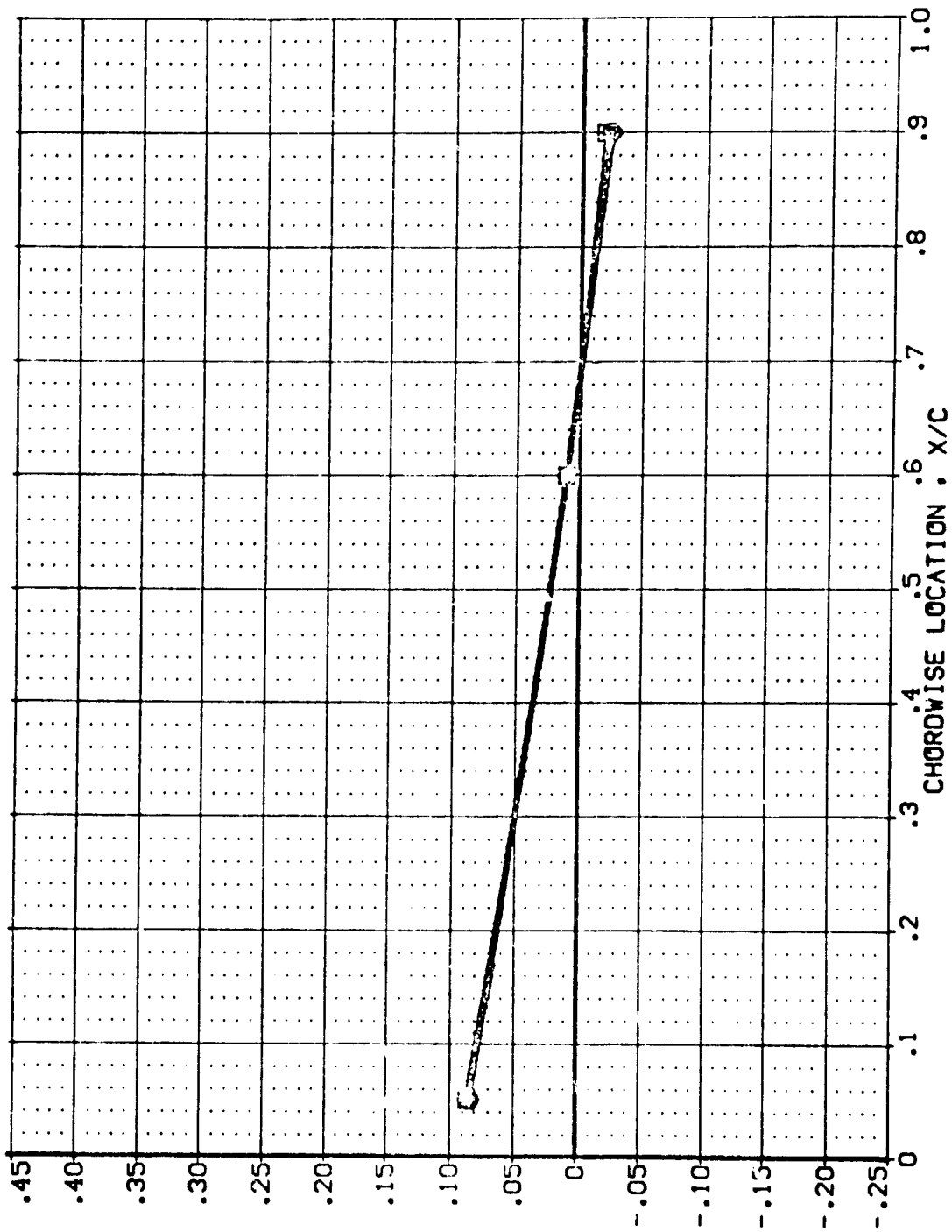
POWER
.000
1.000
1.000
1.000

CDR
13.170
23.650
41.000

SDRPR
.456
.826
1.150

GINBAL
1.000
1.000
1.000

PRESSURE COEFFICIENT, CP



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

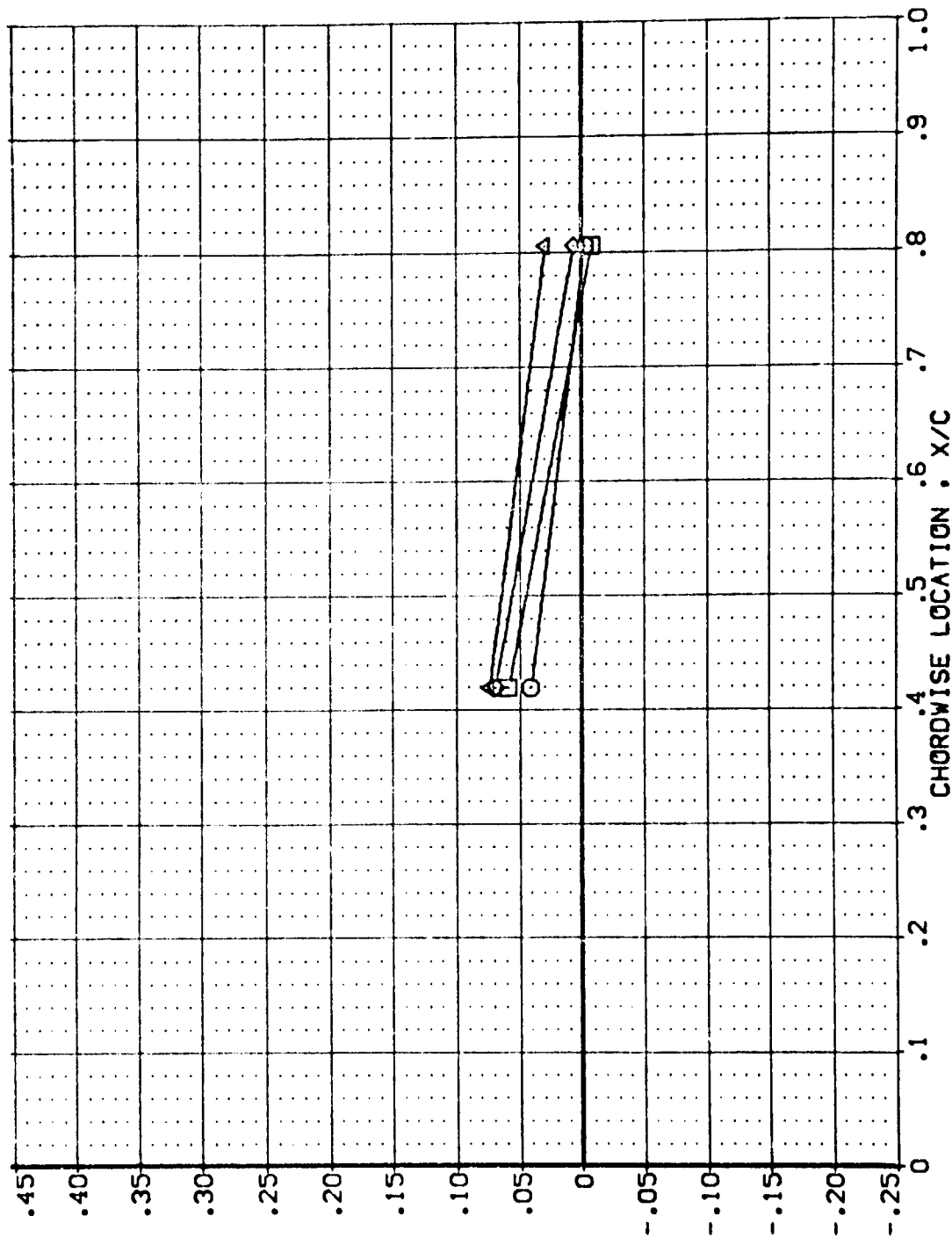
MACH = 3.500 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB7046)
(LB7049)
(LB7050)
(LB7053)

AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER CDR SRPR GIMBAL
.000 13.170 1.000
1.000 23.860 .456
1.000 41.000 .826
1.000 1.150 1.000



PRESSURE COEFFICIENT • CP

PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .427

DATA SET SYMBOL
(LBZ046)
(LBZ049)
(LBZ050)
(LBZ053)

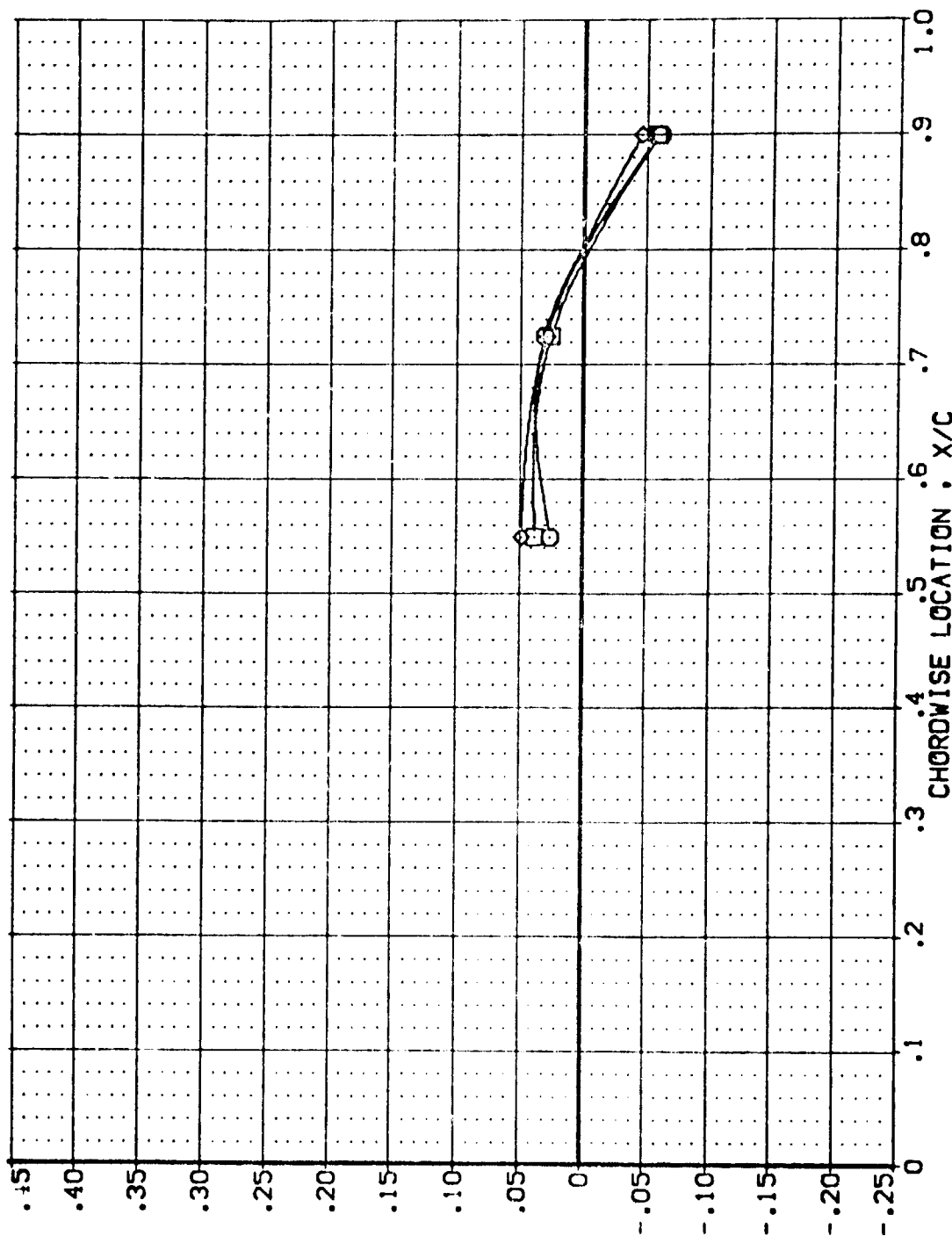
CONFIGURATION DESCRIPTION
AIES 87-710
AIES 87-710
AIES 87-710
AIES 87-710

LOVER WING PRESSURE
LOVER WING PRESSURE
LOVER WING PRESSURE
LOVER WING PRESSURE

POWER
.000
1.000
1.000
1.000

OPR
13.170
23.650
41.000

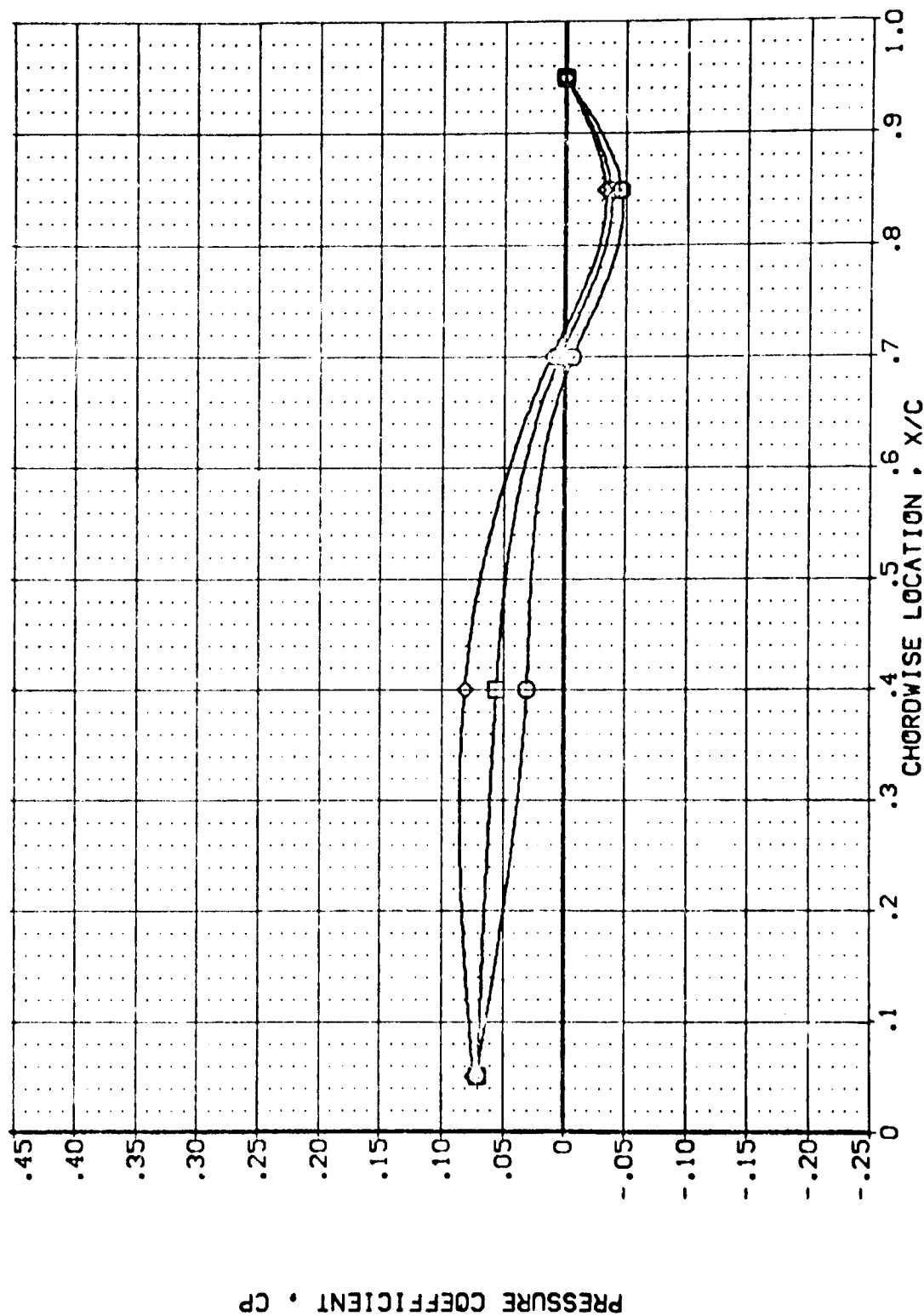
GIMBAL
1.000
1.000
1.000
1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .534


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SRPR	GIMBAL
(LB2046)	AVES 87-710	1.000	13.170	.456	1.000
(LB2049)	AVES 87-710	1.000	23.650	.826	1.000
(LB2050)	AVES 87-710	1.000	41.000	1.150	1.000
(LB2053)	AVES 87-710	1.000			





PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ046)  AYES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE

(LBZ049)  AYES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE

(LBZ050)  AYES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE

(LBZ053)  AYES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE

POWER CDR SHPR GIMBAL

.000 13.170 .456 1.000

1.000 23.630 .826 1.000

1.000 41.000 1.150 1.000

PRESSURE COEFFICIENT, CP



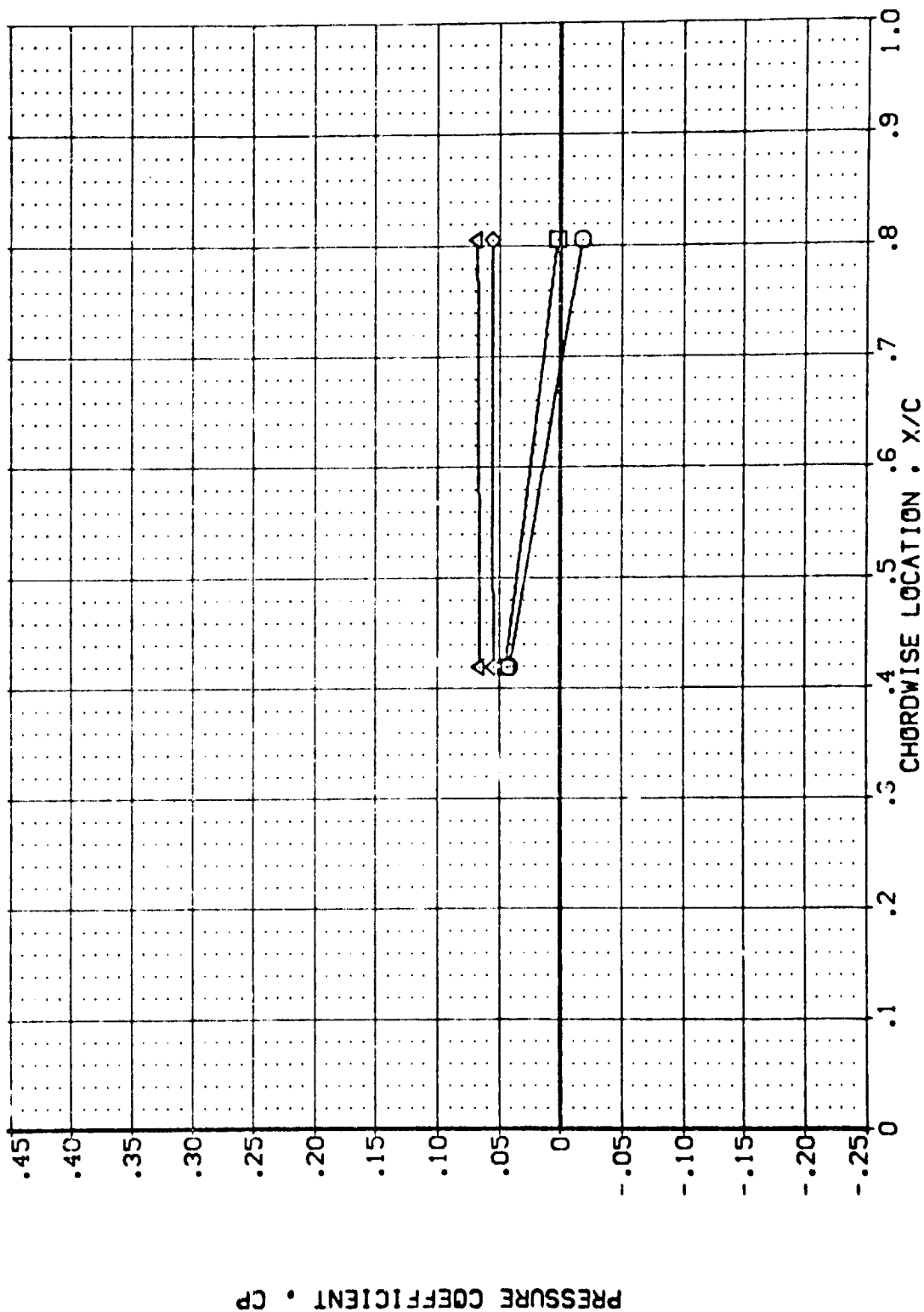
PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .887

PAGE 68



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SNPR	GIMBAL
(LBZ046)	AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	.000	13.170	.455	1.000
(LBZ049)	AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	1.000	23.860	.835	1.000
(LBZ050)	AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	1.000	41.000	1.150	1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .427

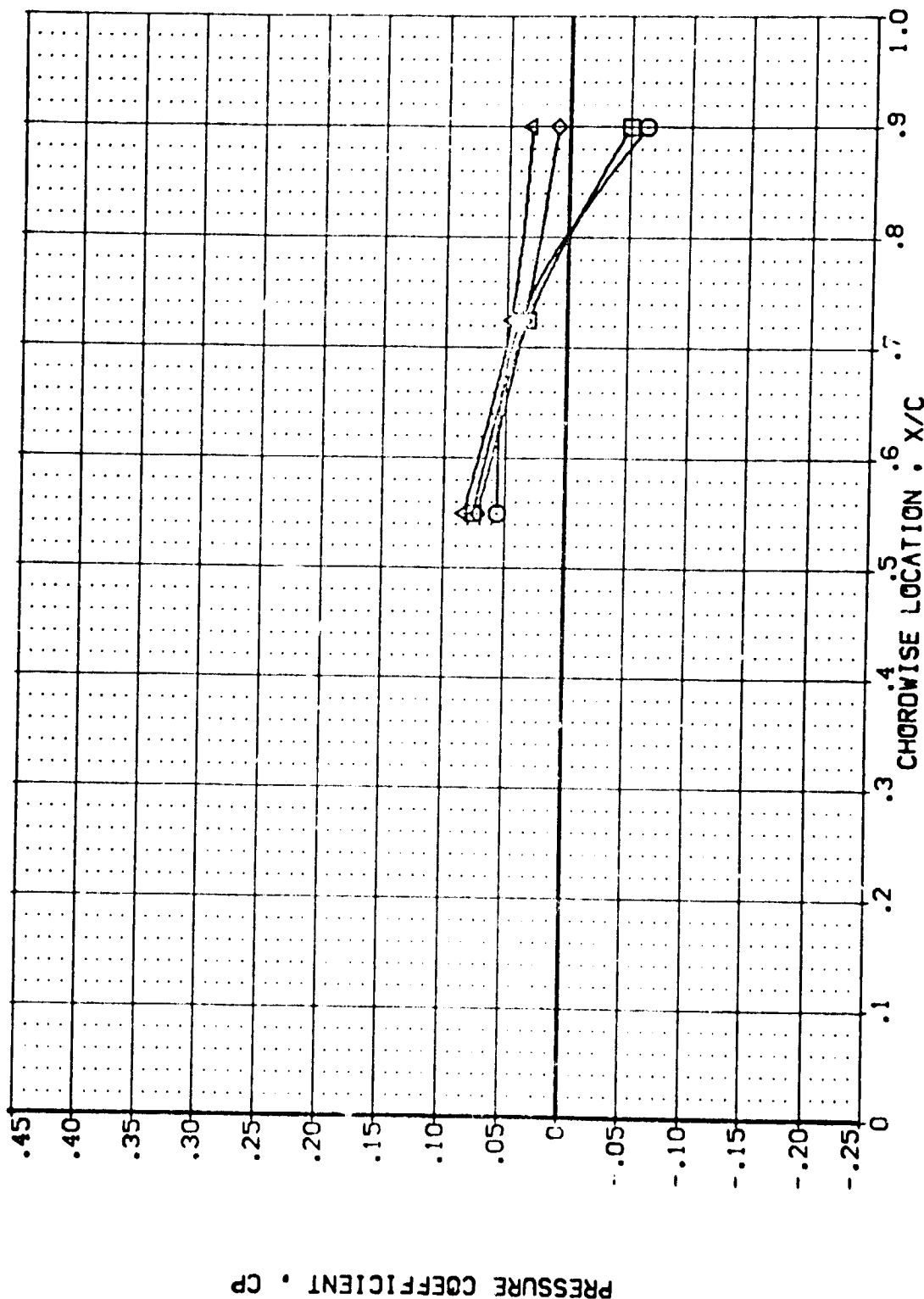
DATA SET SYMBOL

(LBZD46)
(LBZD49)
(LBZD50)
(LBZD53)

□
○
×

CONFIGURATION DESCRIPTION
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE

POWER .000
OPR 13.170
SRPR .456
GIMBAL 1.000
1.000
1.000
1.000

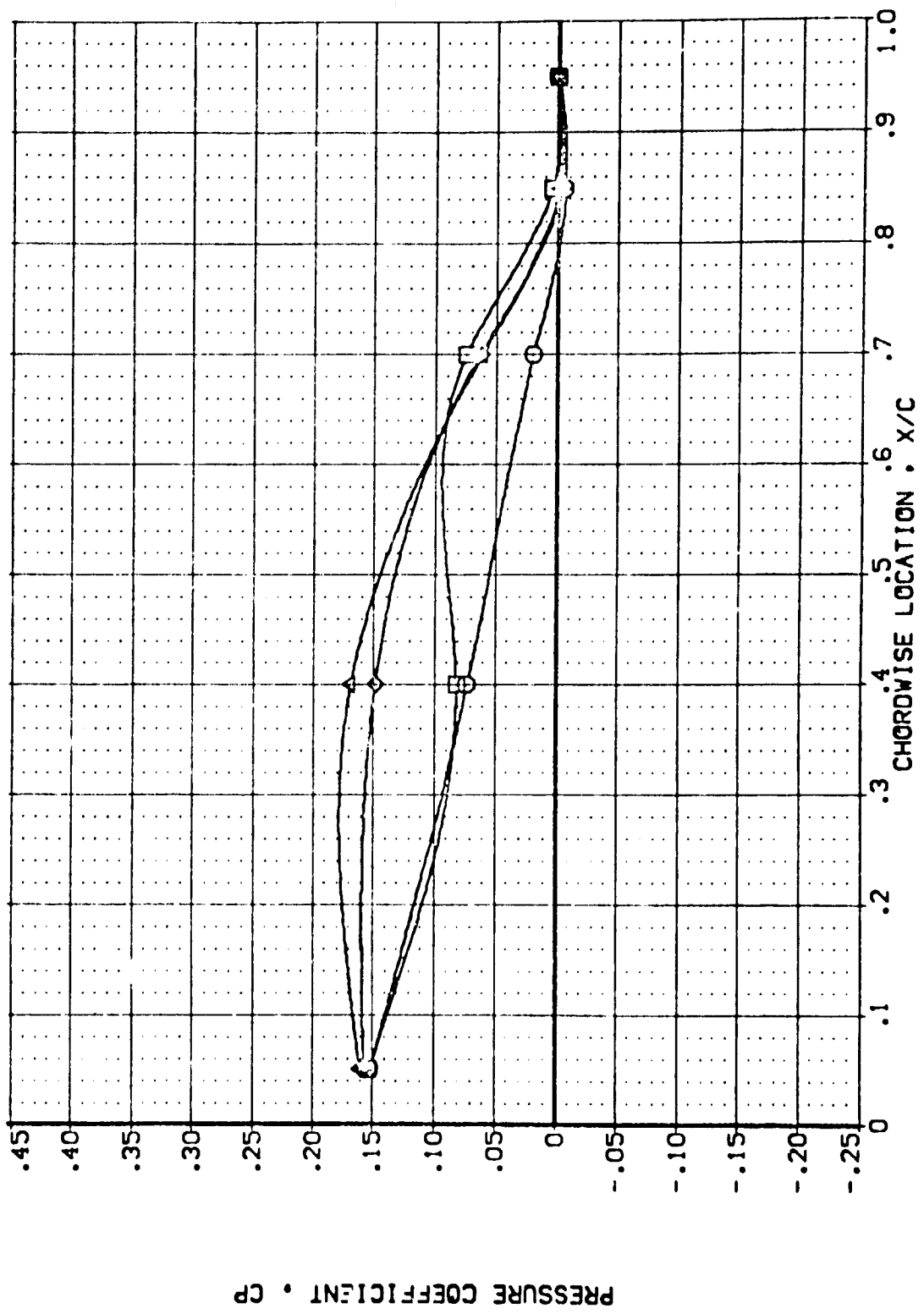


PRESSURE COEFFICIENT, CP

PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

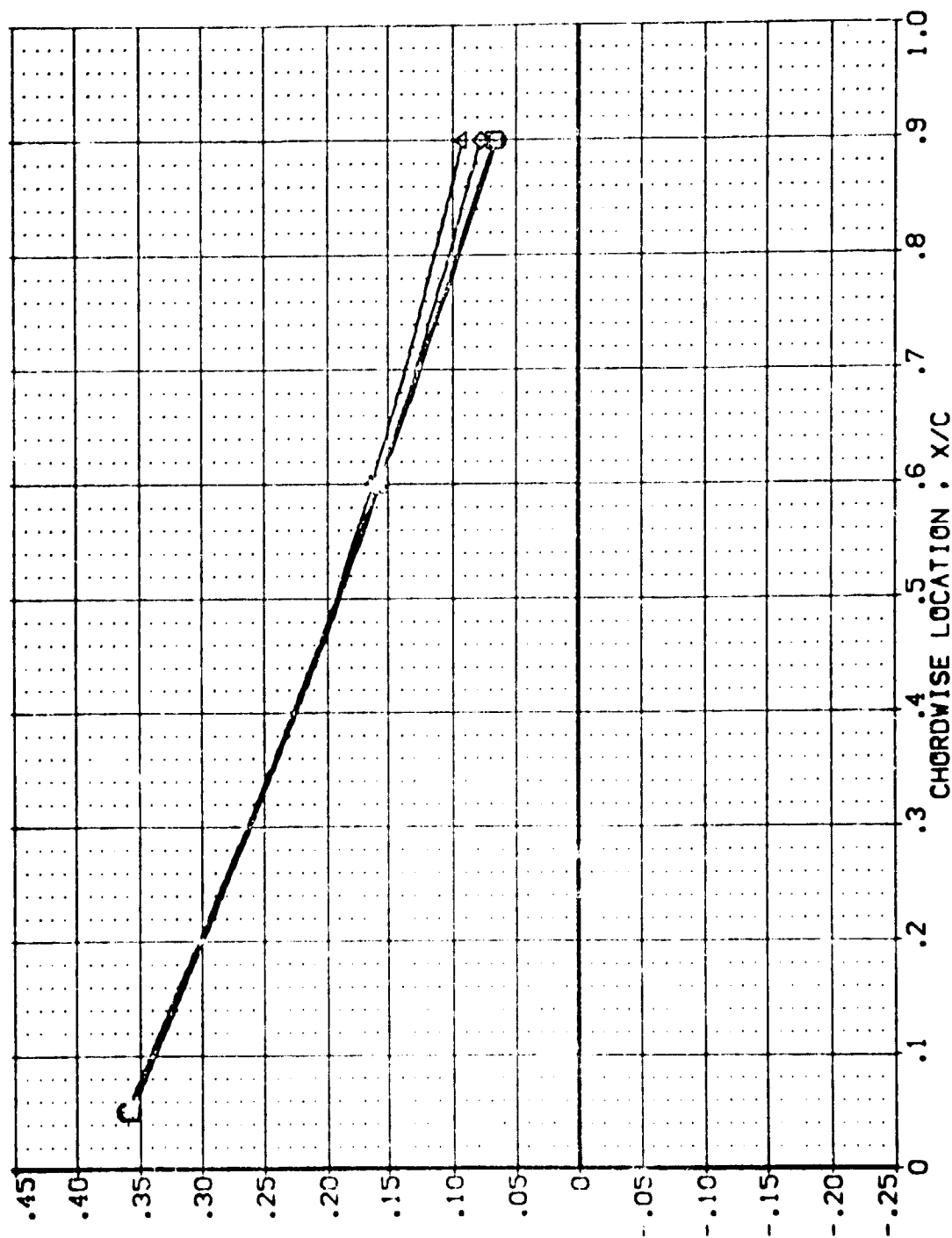
MACH = 3.500 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CPR	SMFR	GIMBAL
(LB2046)	AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	.000	13.170	.456	1.000
(LB2049)	AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	1.000	23.800	.826	1.000
(LB2050)	AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	1.000	41.000	1.150	1.000
(LB2053)					



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SRPR	GIMBAL
(LBZD4S)	APES 87-710 IAI2C 01 T1 S1	.000			1.000
(LBZD4S)	APES 87-710 IAI2C 01 T1 S1	1.000	13.170	.456	1.000
(LBZD4S)	APES 87-710 IAI2C 01 T1 S1	1.000	23.800	.826	1.000
(LBZD4S)	APES 87-710 IAI2C 01 T1 S1	1.000	41.000	1.150	1.000



PLUME SIZE EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .887

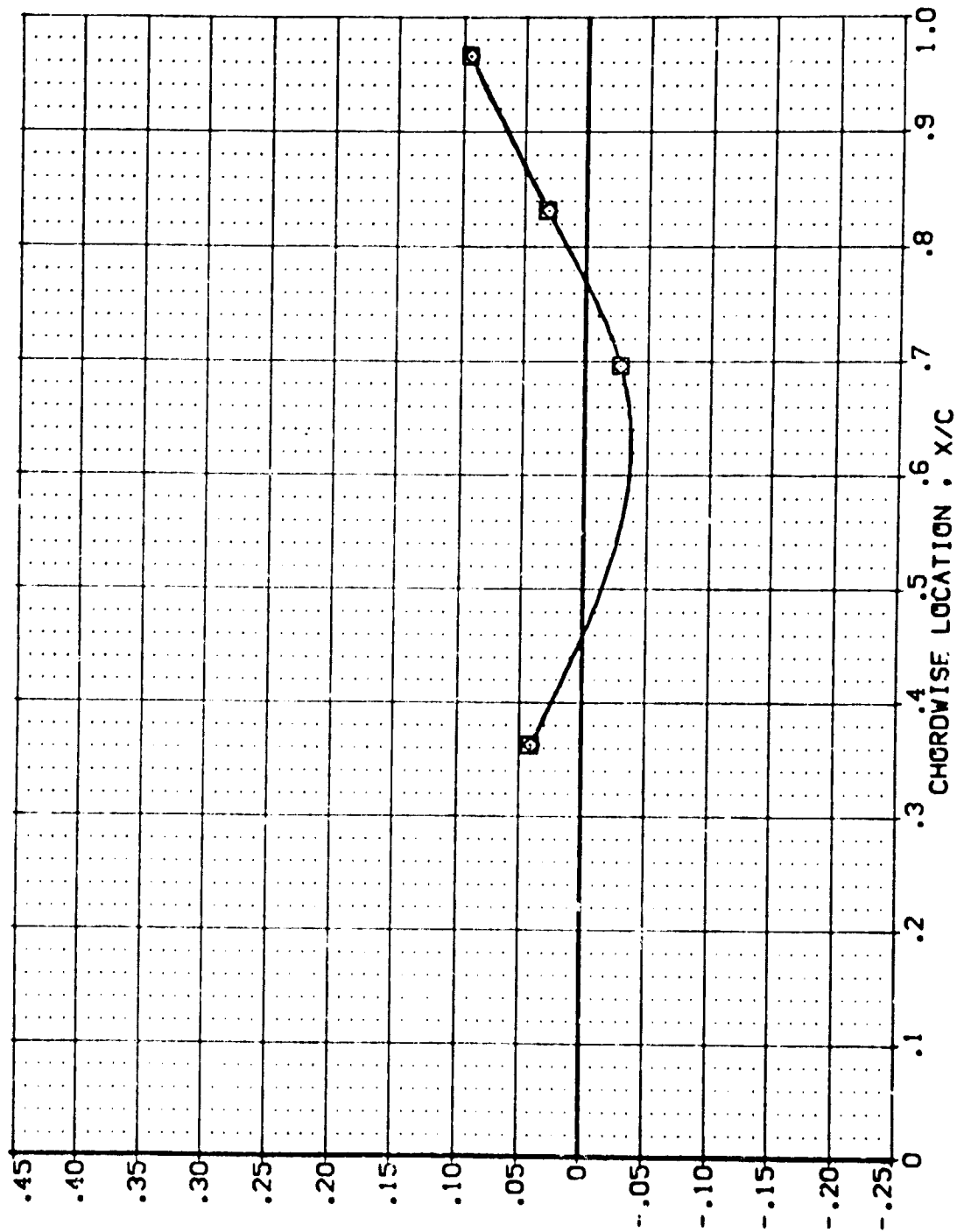
DATA SET SYMBOL

(UB2037)
(UB2078)
(UB2082)

CONFIGURATION DESCRIPTION

AVES 87-710 IATC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IATC 03 T1 S1 UPPER WING PRESSURE
AVES 87-710 IATC 04 T1 S1 UPPER WING PRESSURE

POWER C/P SRPR GIMBAL
1.000 31.260 .916 1.000
1.000 31.260 .916 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .299

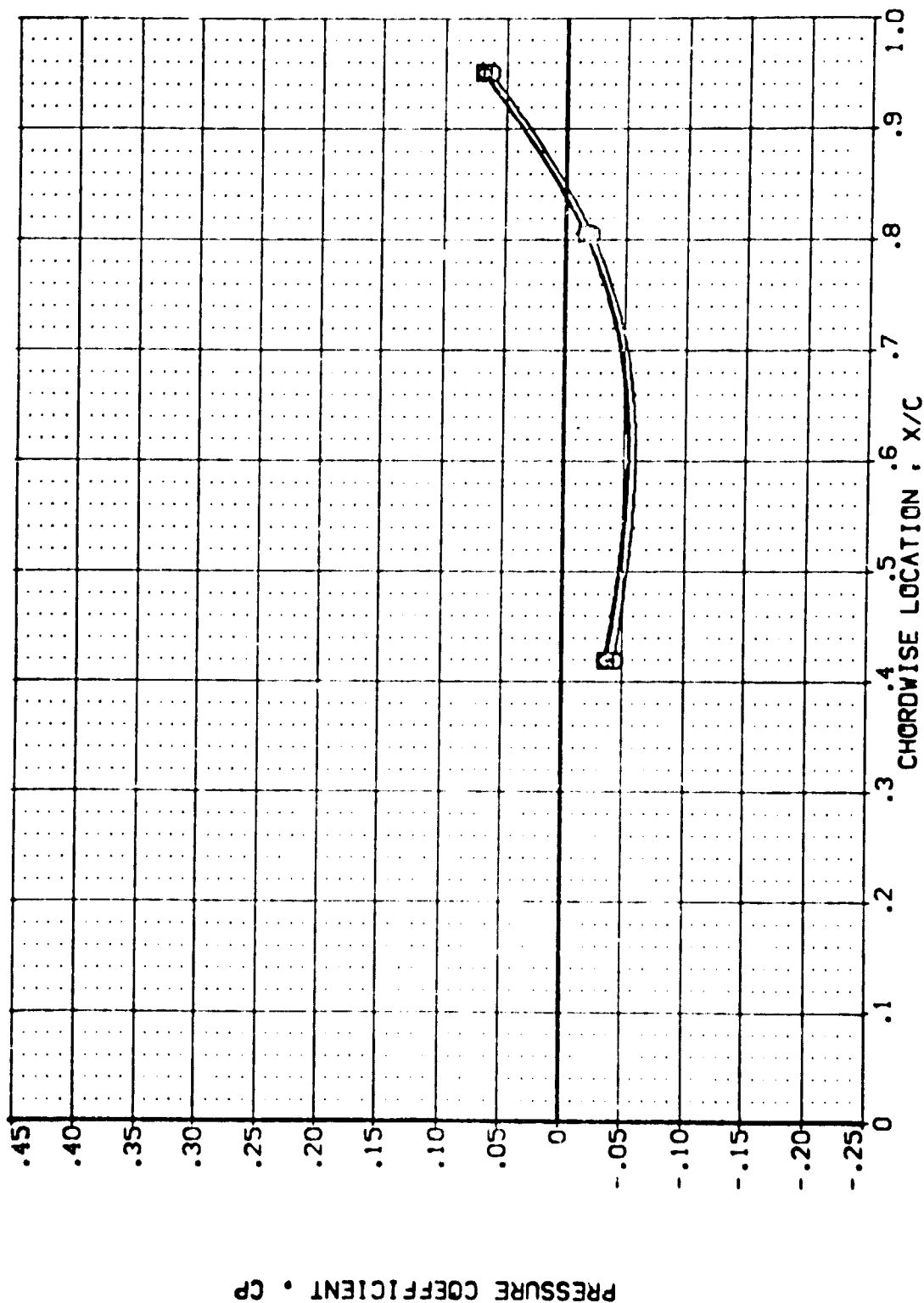
DATA SET SYMBOL

(UB2007)
(UB2008)
(UB2009)

CONFIGURATION DESCRIPTION

AMES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 1A12C 03 T1 S1 UPPER WING PRESSURE
AMES 87-710 1A12C 04 T1 S1 UPPER WING PRESSURE

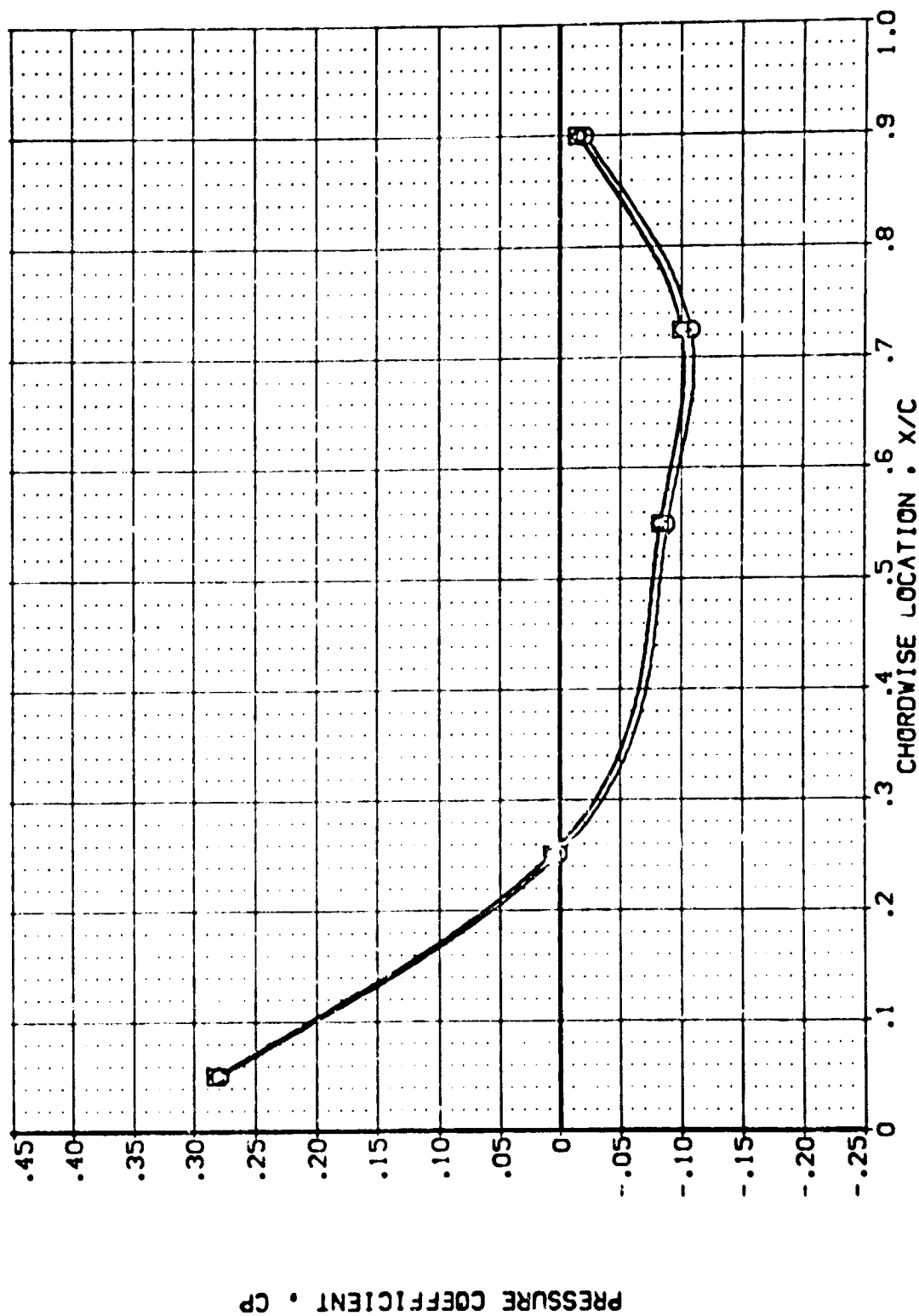
POWER 0.000
1.000
1.000
1.000
SOPR .916
31.260
31.260
GIMBAL 1.000
1.000
1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SWPR	01MBAL
(UB2037)	AVES 87-710 1A12C C1 T1 S1 UPPER WING PRESSURE	.000	31.260	.916	1.000
(UB2078)	AVES 87-710 1A12C C3 T1 S1 UPPER WING PRESSURE	1.000	31.260	.916	1.000
(UB2082)	AVES 87-710 1A12C C4 T1 S1 UPPER WING PRESSURE	1.000	31.260	.916	1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

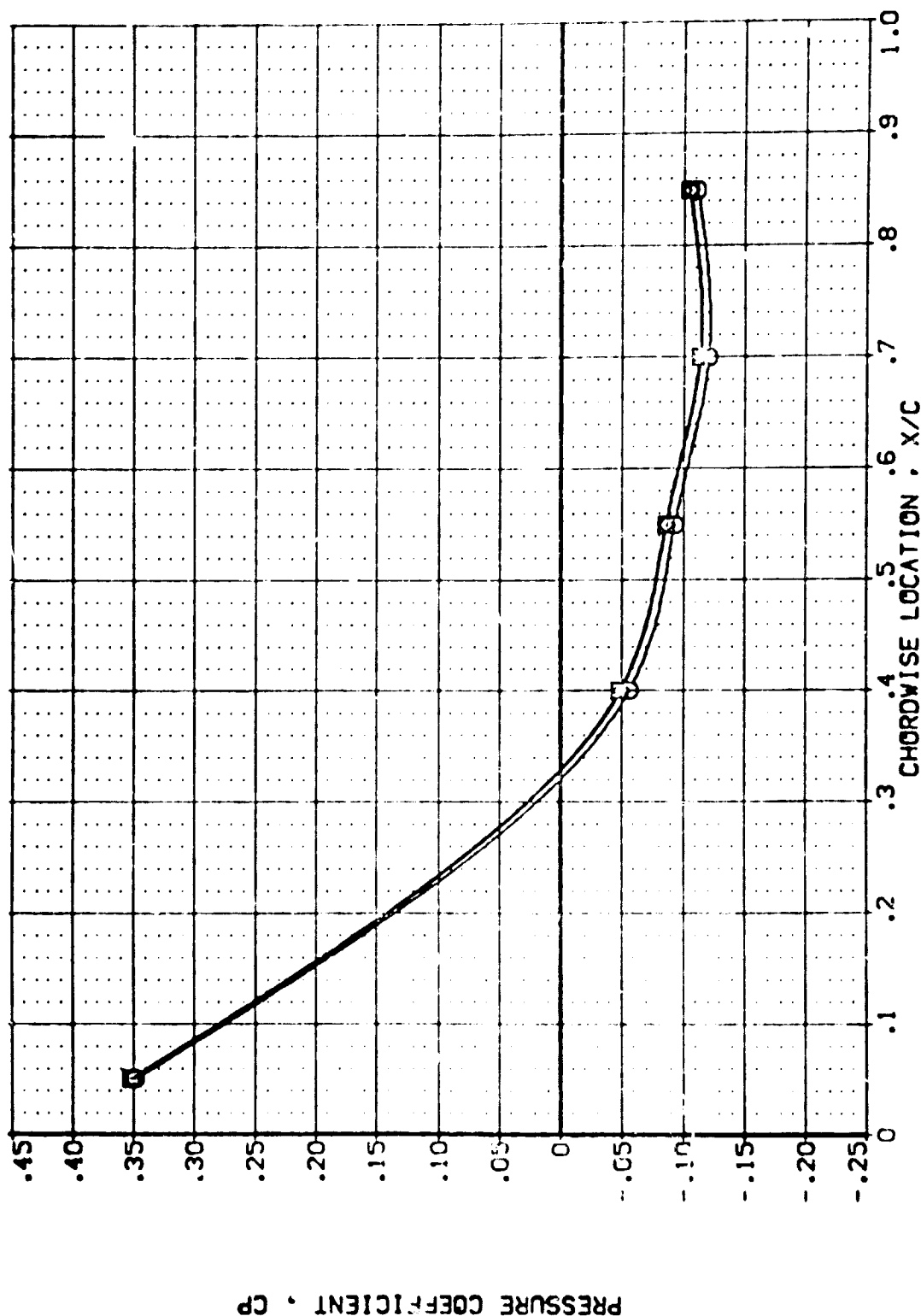
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB7007)
(UB7078)
(UB7082)

AMES 87-710 IAI2C 01 T1 S1
AMES 87-710 IAI2C 03 T1 S1
AMES 87-710 IAI2C 04 T1 S1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER C/P S/CPR S/MBAL
.000 31.250 .916 1.000
1.000 31.250 .916 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

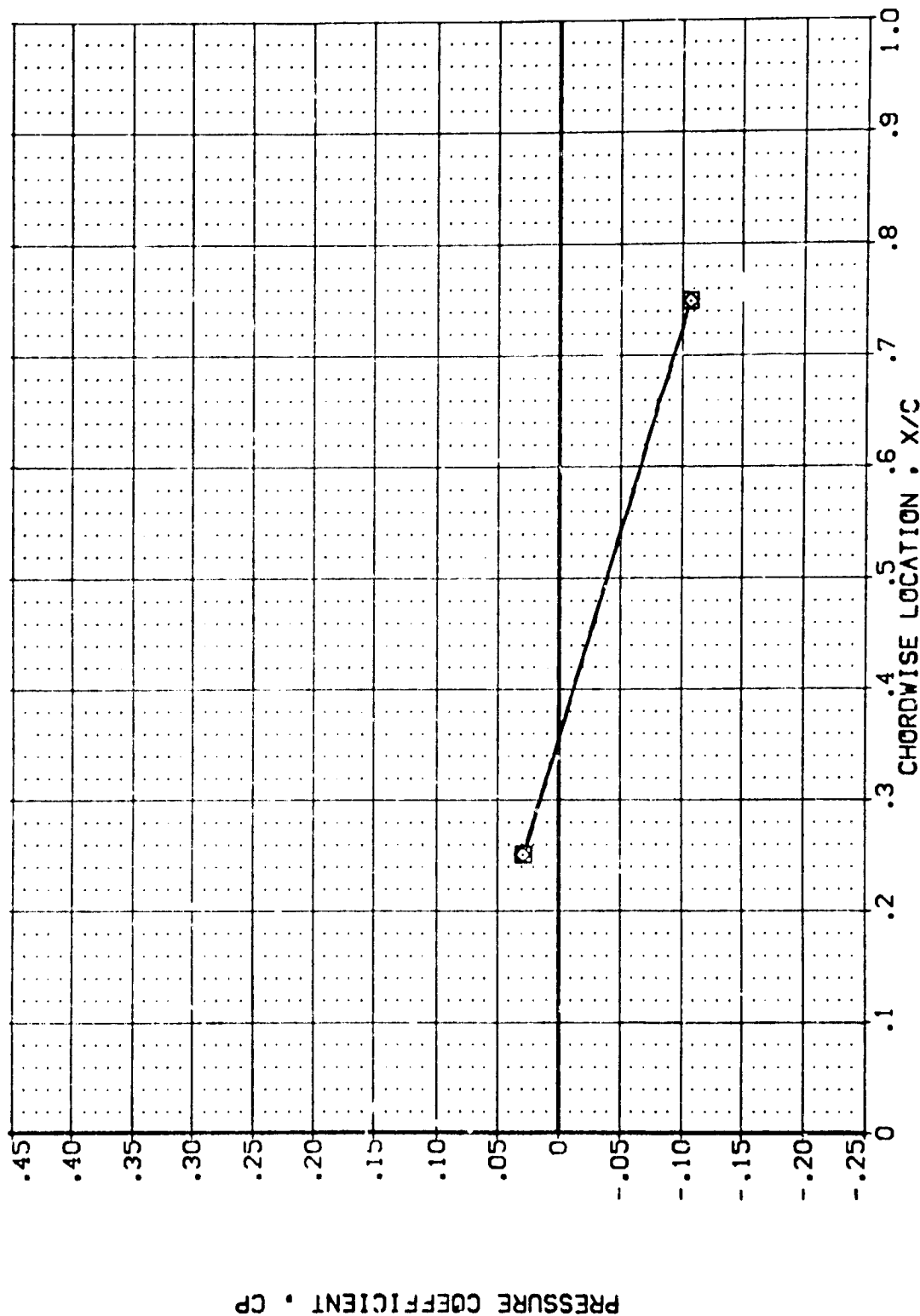
MACH = 2.500 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/P GIMBAL

(L32037) AYES 87-710 IAL2C 01 T1 S1 UPPER WING PRESSURE .000 .000 .000

(L32038) AYES 87-710 IAL2C 03 T1 S1 UPPER WING PRESSURE .000 .916 .000

(L32039) AYES 87-710 IAL2C 04 T1 S1 UPPER WING PRESSURE .000 .916 .000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBC 7)
(UBC 8)
(UBC 82)

AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 T1 S1
IA12C 03 T1 S1
IA12C 04 T1 S1

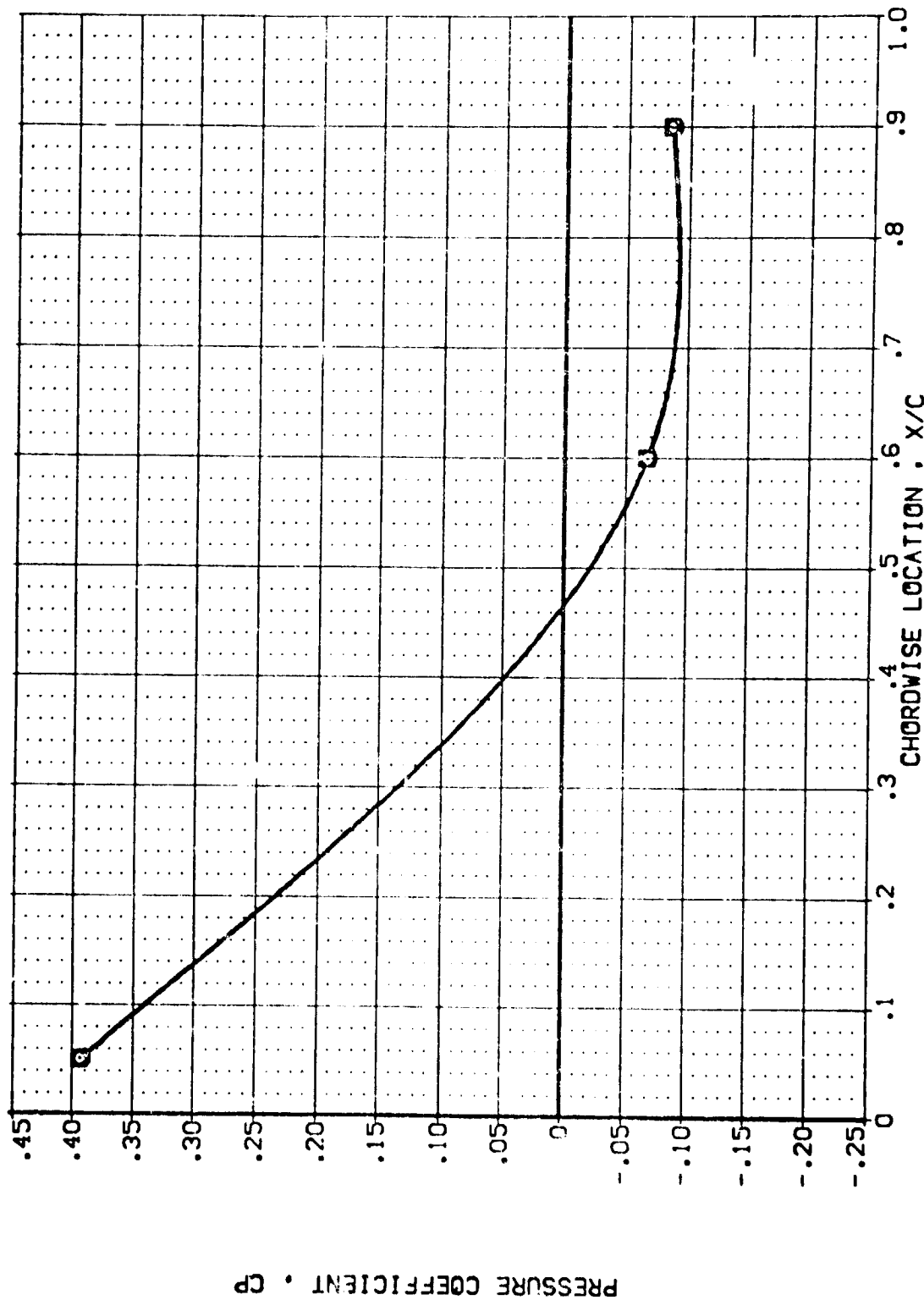
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER
.000
1.000
1.000

CFR
31.260
31.260

SRPR
.916
.916

GIMBAL
1.000
1.000
1.000

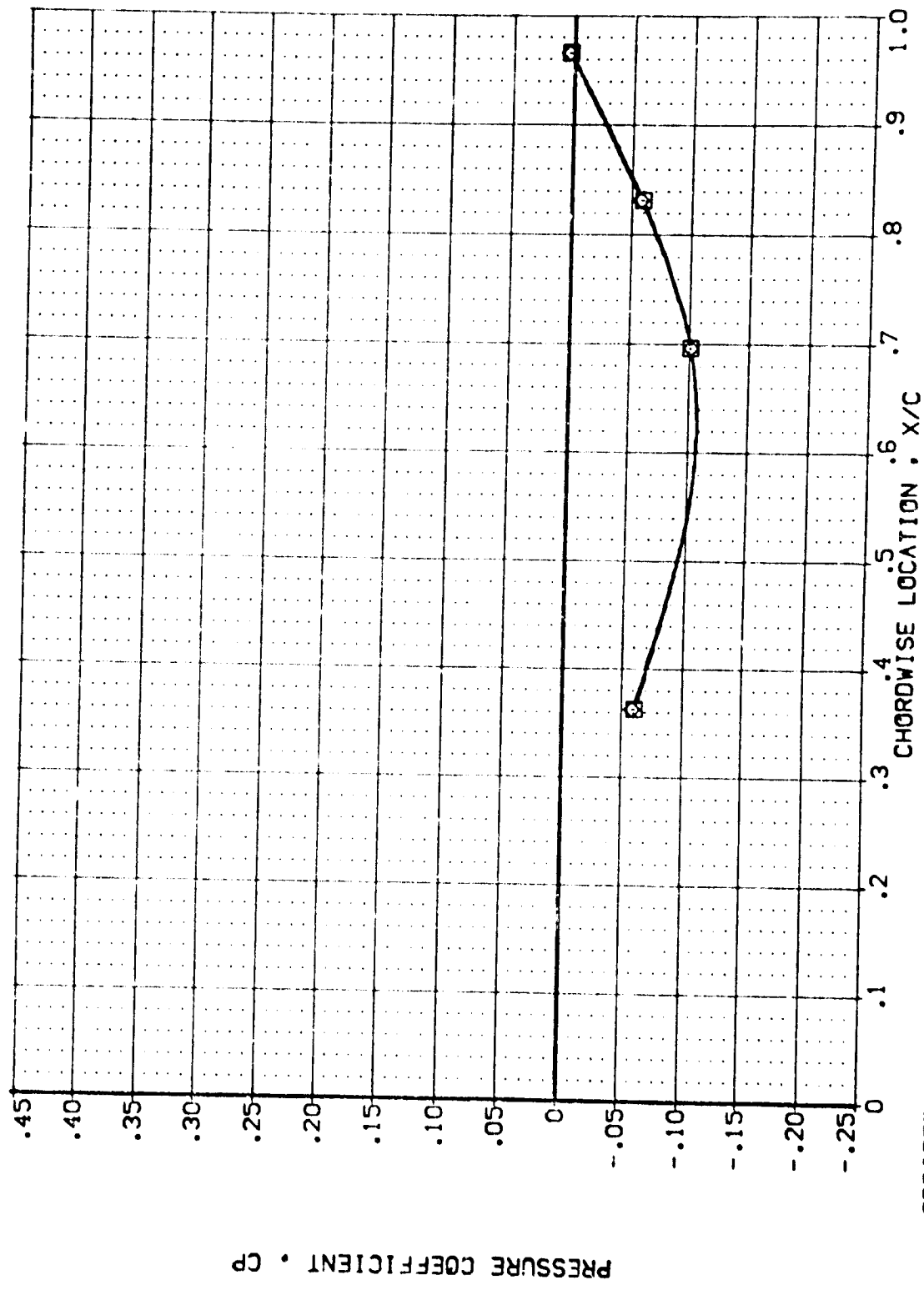


ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UB2037) AYES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (UB2078) AYES 87-710 1A12C 03 T1 S1 UPPER WING PRESSURE
 (UB2082) AYES 87-710 1A12C 04 T1 S1 UPPER WING PRESSURE

POWER 1.000
 1.000 31.260
 .916 .916
 1.000 1.000



PRESSURE COEFFICIENT, CP

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .299

DATA SET SYMBOL

(UBZ0037)
(UBZ0078)
(UBZ0082)

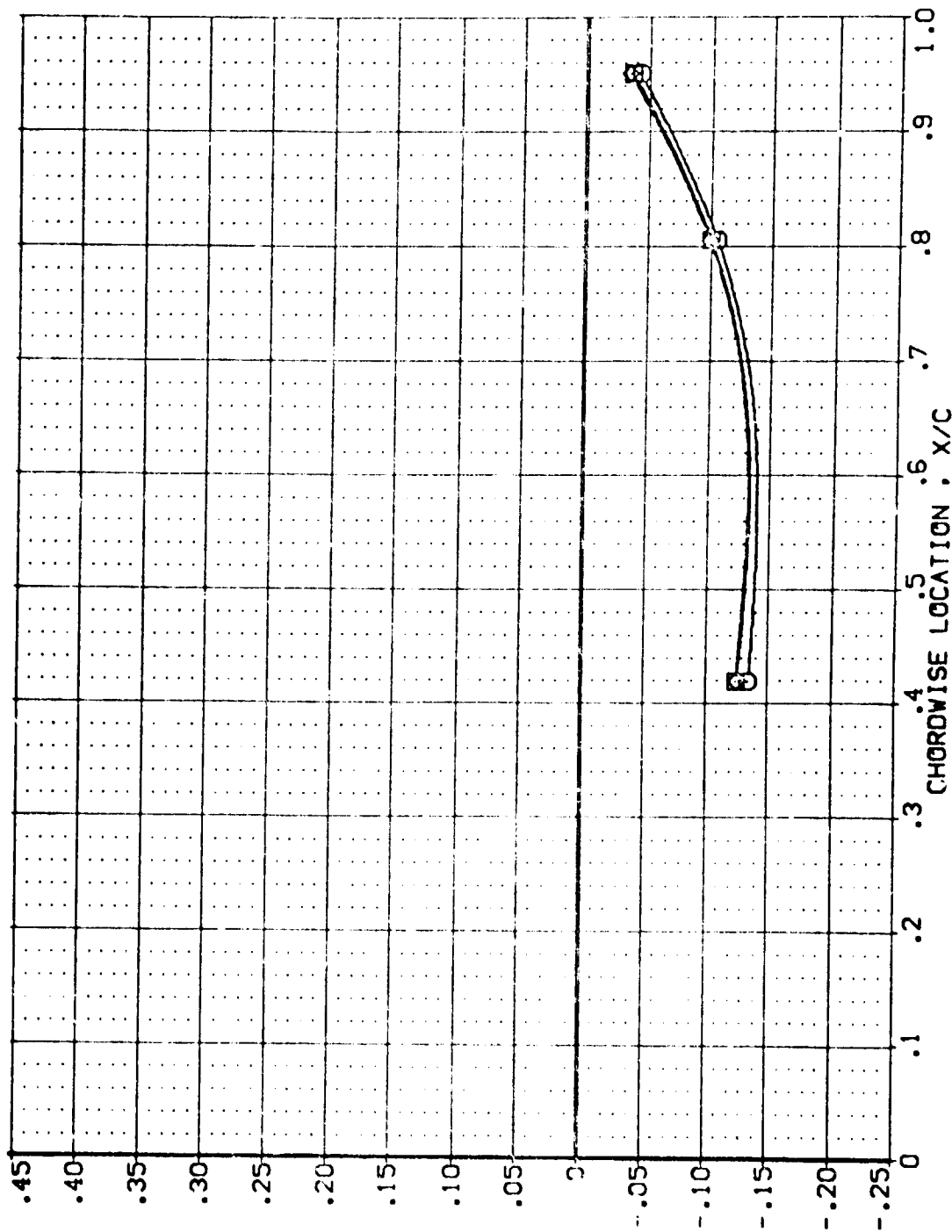


CONFIGURATION DESCRIPTION

AVES 87-710 IAL2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAL2C 03 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAL2C 04 T1 S1 UPPER WING PRESSURE

POWER 0.000 31.260
1.000 31.260
SHAPE .916
GIMBAL 1.000
1.000

PRESSURE COEFFICIENT, CP



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

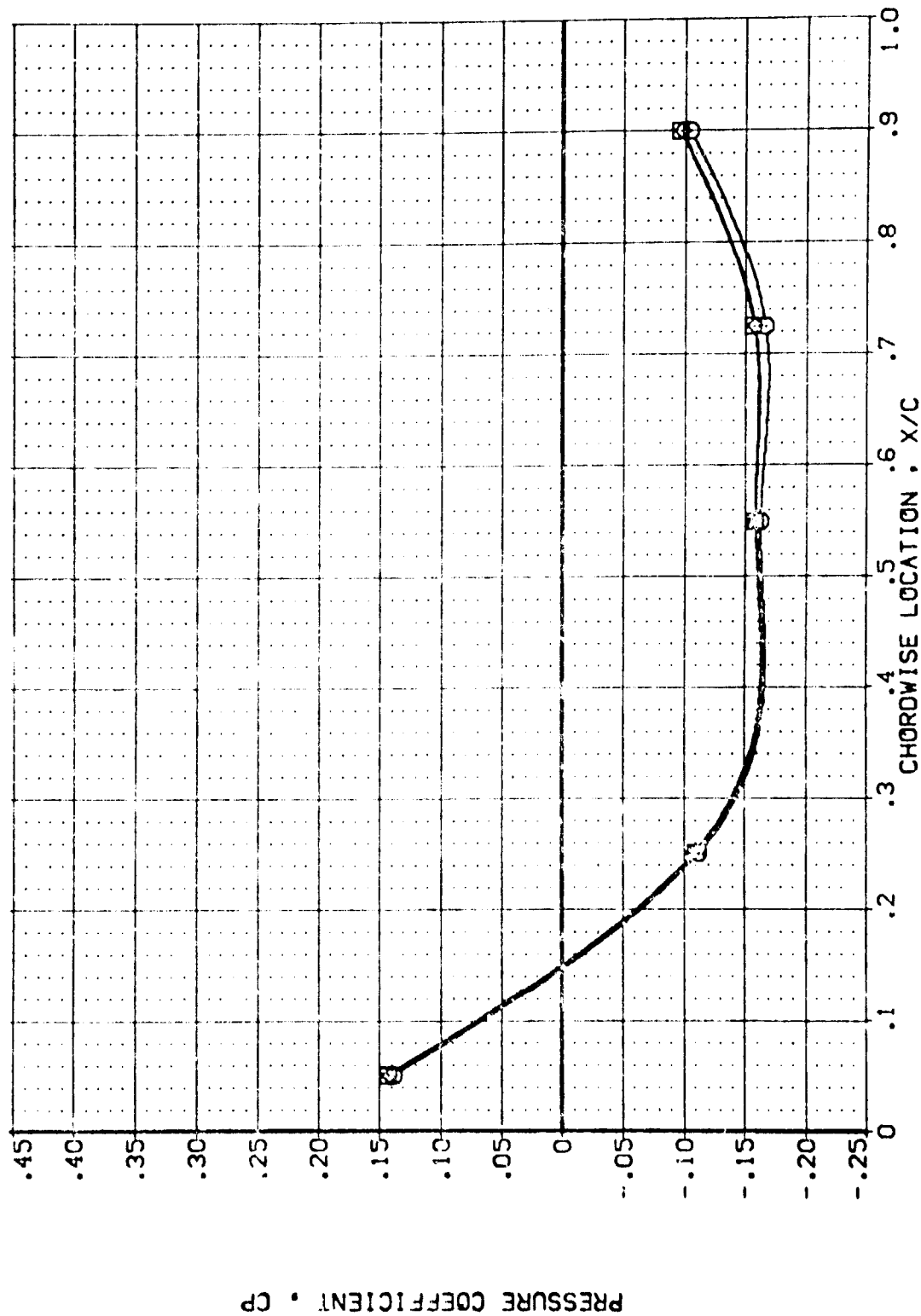
MACH = 2.500 ALPHA = .000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER DPR SHPR GIMBAL

(UB0007) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 31.260 .916 1.000

(UB0008) AYES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE 1.000 31.260 .916 1.000

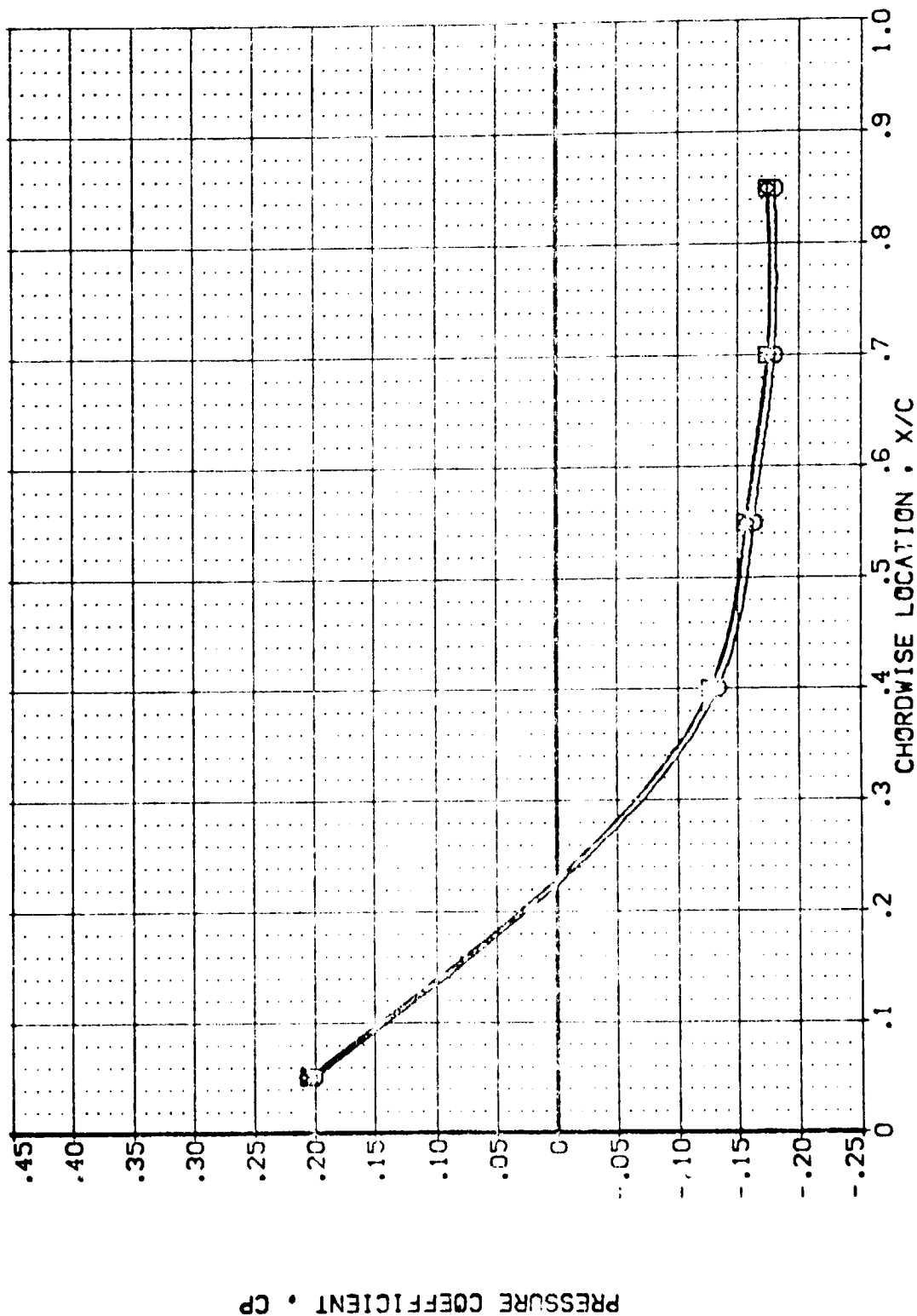
(UB0009) AYES 87-710 IAI2C 04 T1 S1 UPPER WING PRESSURE 1.000 31.260 .916 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UR2037)  AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (UR2078) AVES 87-710 1A12C 03 T1 S1 UPPER WING PRESSURE
 (UB2082) AVES 87-710 1A12C 04 T1 S1 UPPER WING PRESSURE

POWER QPR SRPR GIMBAL
 .000 31.260 .916 1.000
 1.000 31.260 .916 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

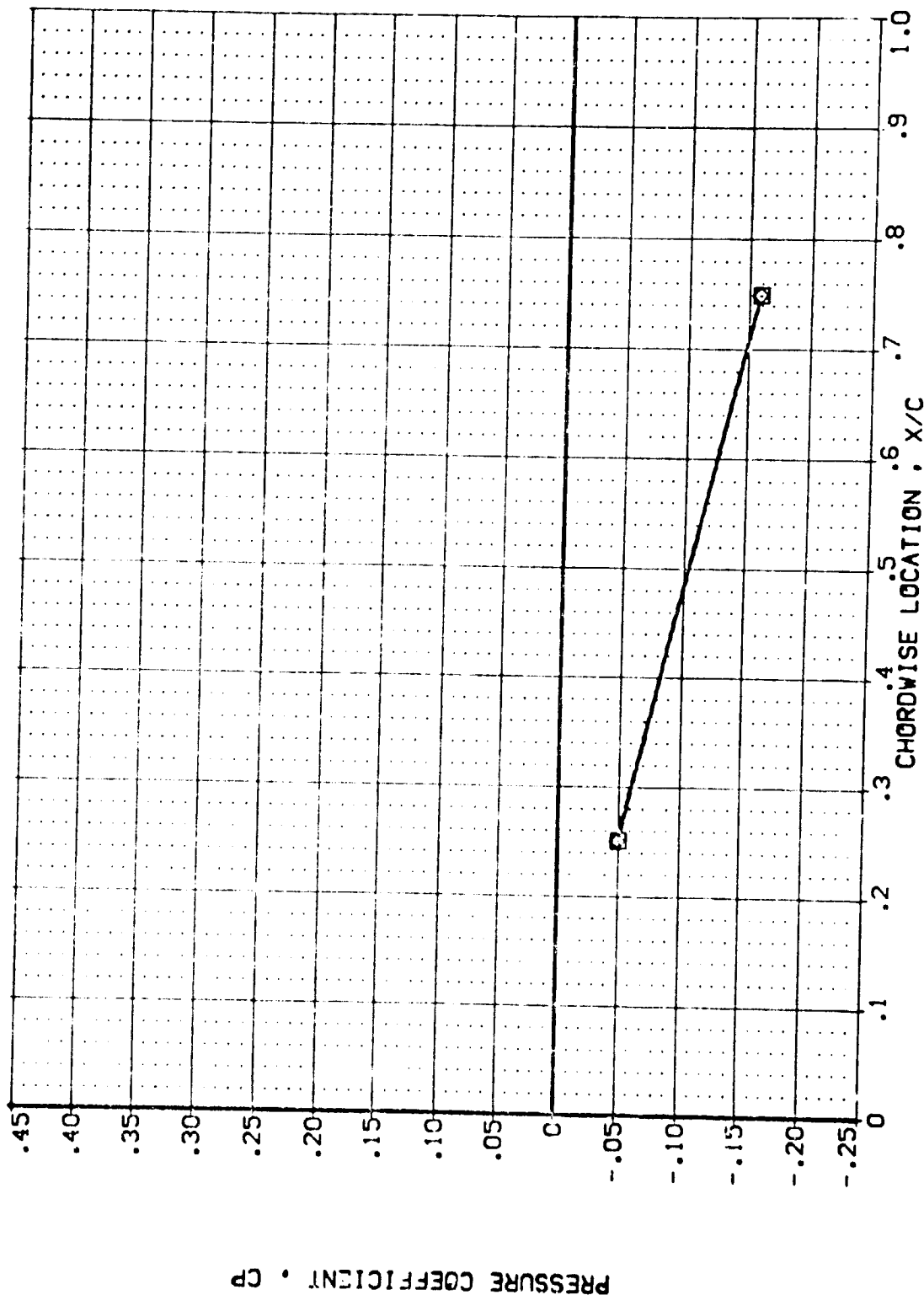
MACH = 2.500 ALPHA = .000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UB2037) ARES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UB2078) ARES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE
 (UB2082) ARES 87-710 IAI2C 04 T1 S1 UPPER WING PRESSURE

POWER GIMBAL
 .000 1.000
 .000 1.000
 .000 1.000

SR-PR .916
 .916

OPR 31.260
 31.260



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2007)
(UB2078)
(UB2082)

APES 87-710
APES 87-710
APES 87-710

IA12C 01 TI SI
IA12C 03 TI SI
IA12C 04 TI SI

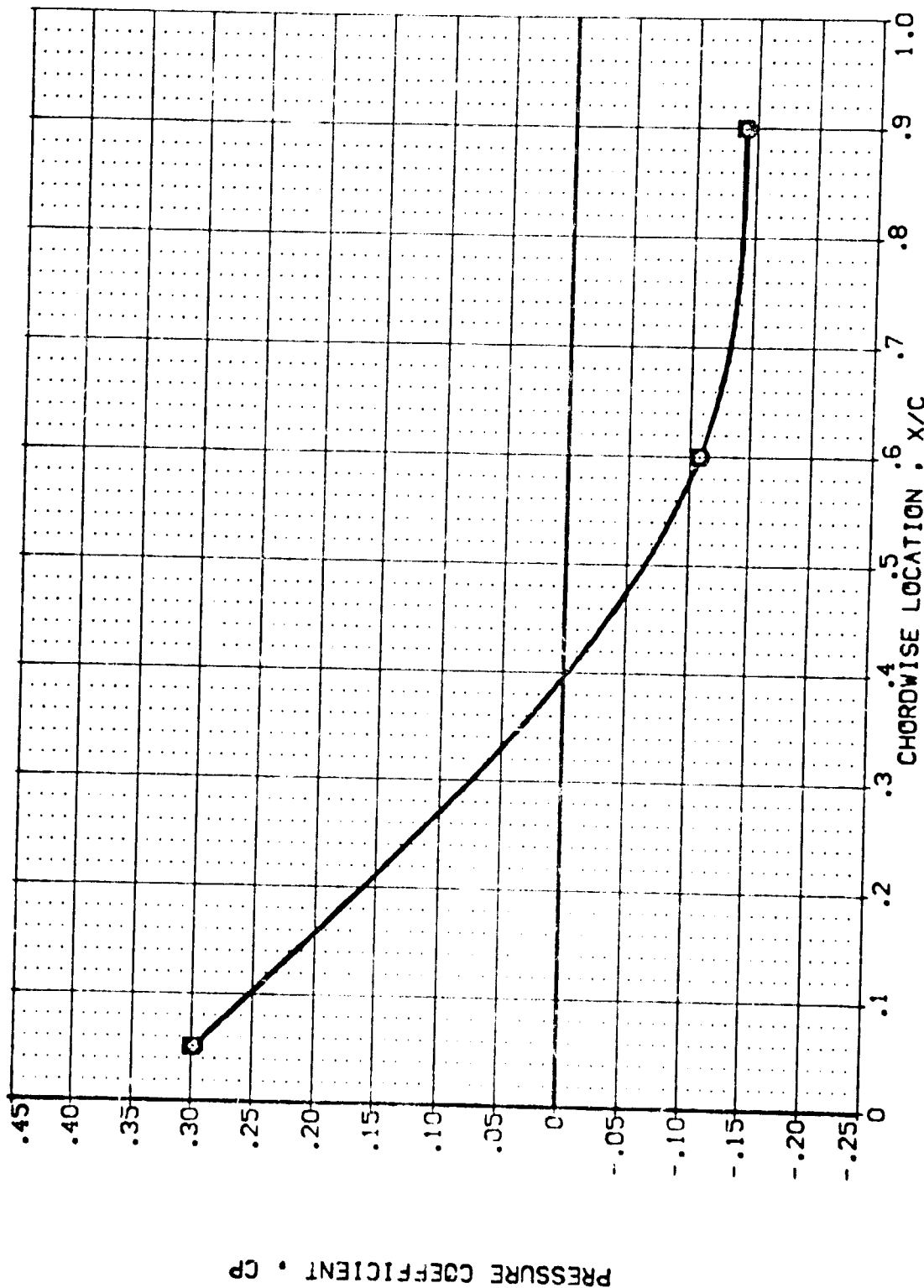
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER
1.000
1.000

OPR
31.260
31.260

SPRFR
.916
.916

GINBAL
1.000
1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

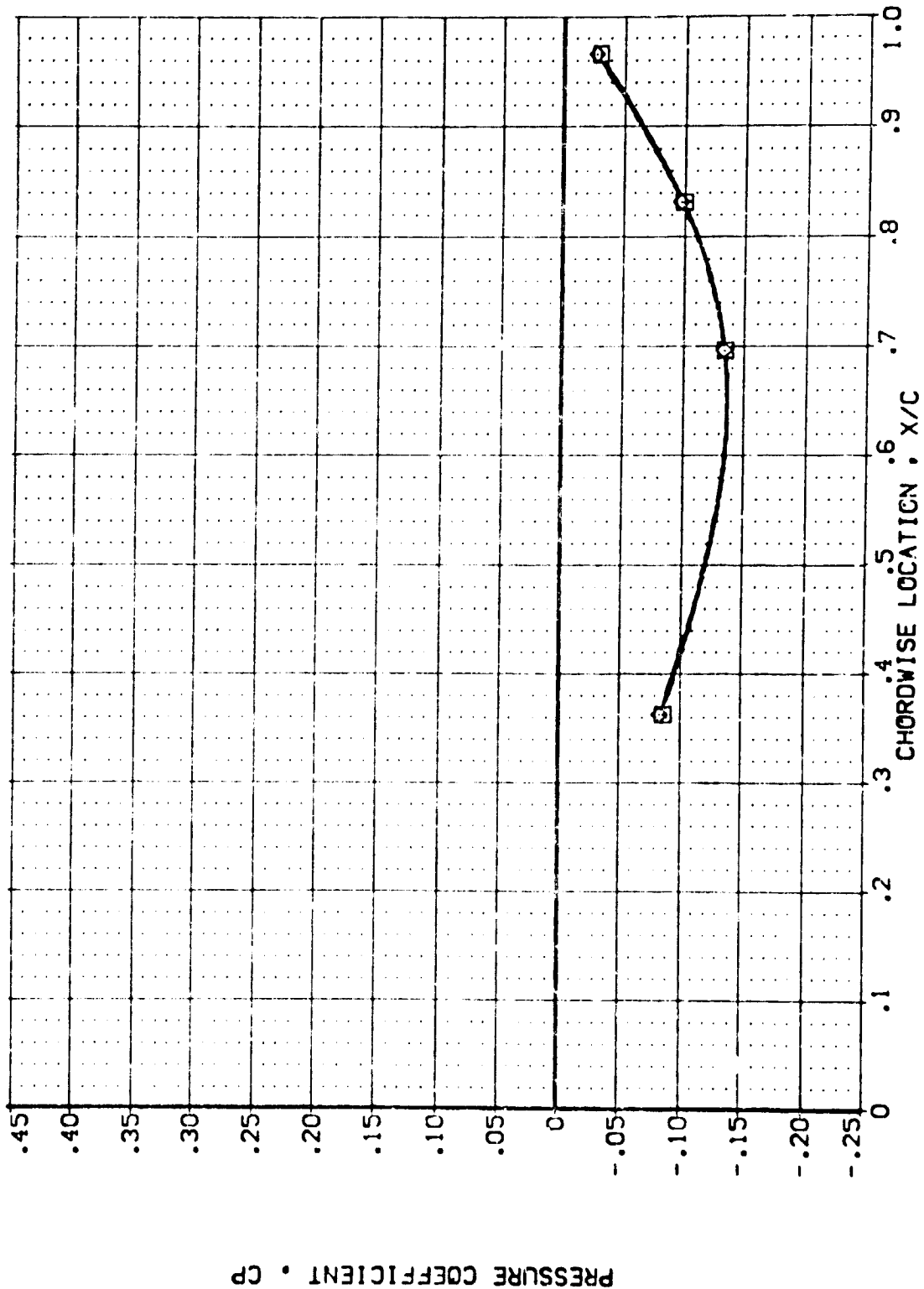
MACH = 2.500 ALPHA = .000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UR2007)
(UR2078)
(UR2002)

AWES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AWES 87-710 1A12C 03 T1 S1 UPPER WING PRESSURE
AWES 87-710 1A12C 04 T1 S1 UPPER WING PRESSURE

POWER DFR SDFR GIMBAL
.000 31.260 .916 1.000
1.000 31.260 .916 1.000

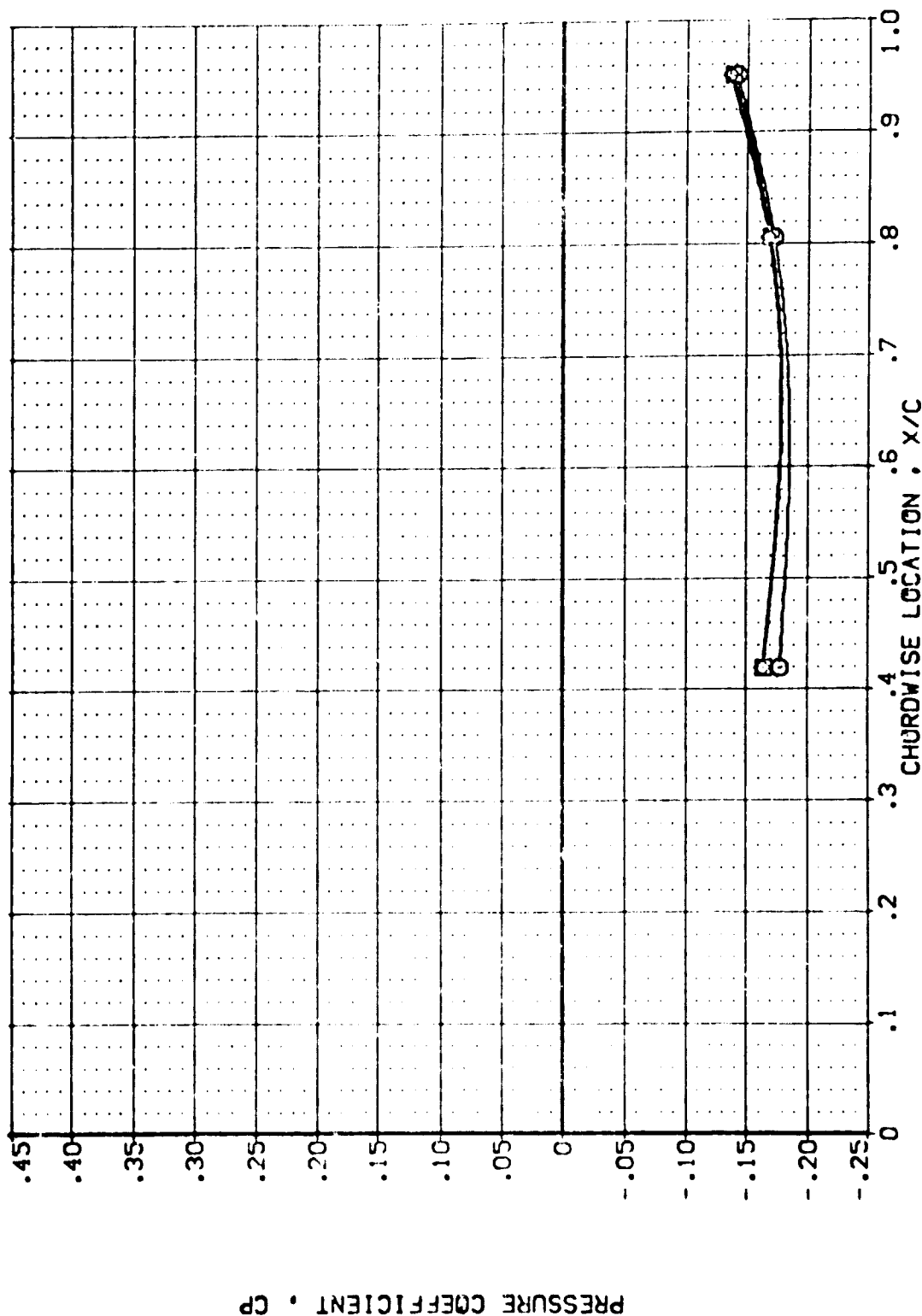


ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UB2037) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UB2078) AYES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE
 (UB2082) AYES 87-710 IAI2C 04 T1 S1 UPPER WING PRESSURE

POWER OPR SRPR GIBAL
 .000 31.260 .916 1.000
 1.000 31.260 .916 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

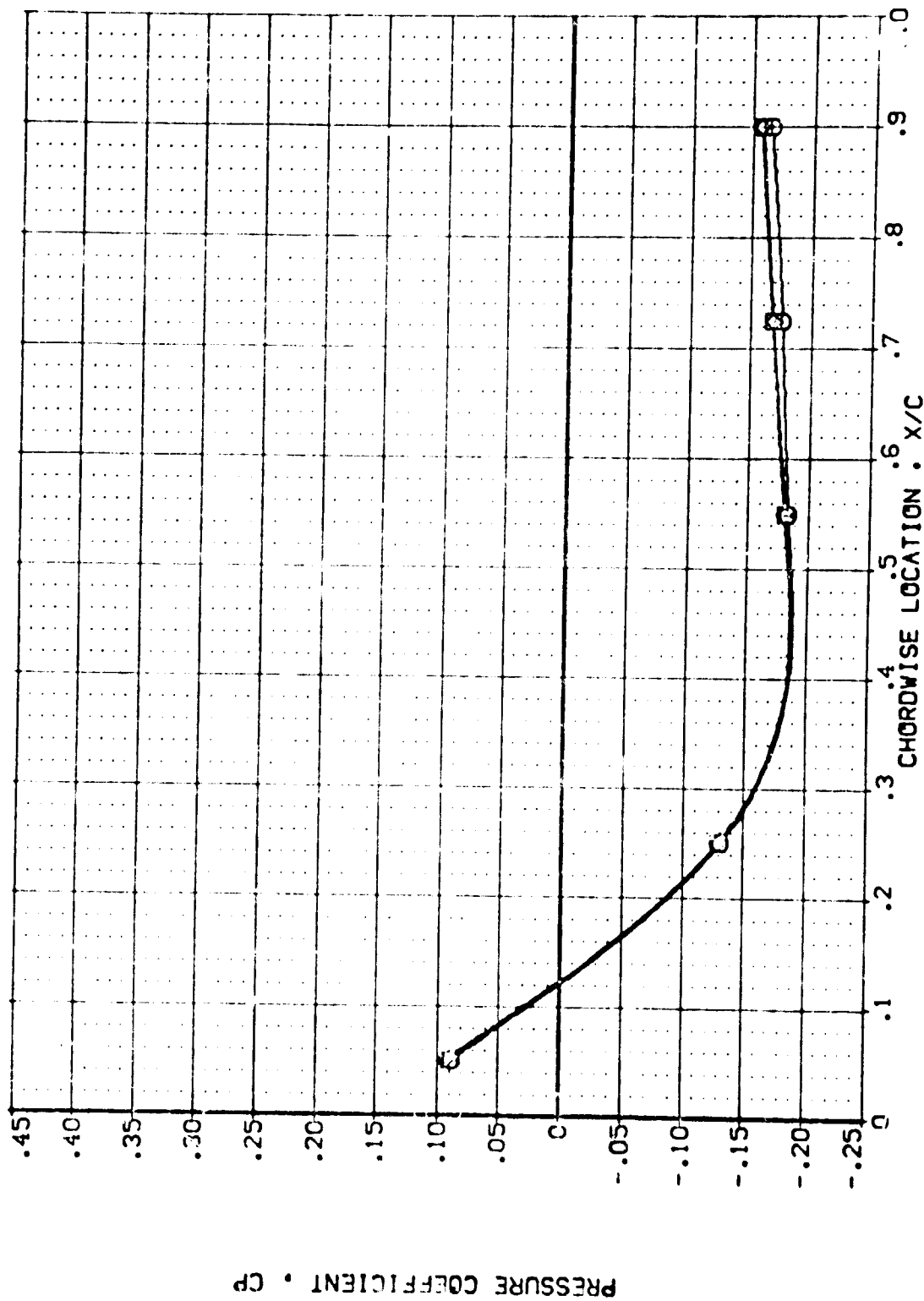
MACH = 2.500 ALPHA = 6.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SRRPR GIMBAL

(JBL037) APES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 31.280 .916 1.000

(JBL078) APES 87-710 1A12C 03 T1 S1 UPPER WING PRESSURE 1.000 31.280 .916 1.000

(JBL002) APES 87-710 1A12C 04 T1 S1 UPPER WING PRESSURE 1.000 31.280 .916 1.000

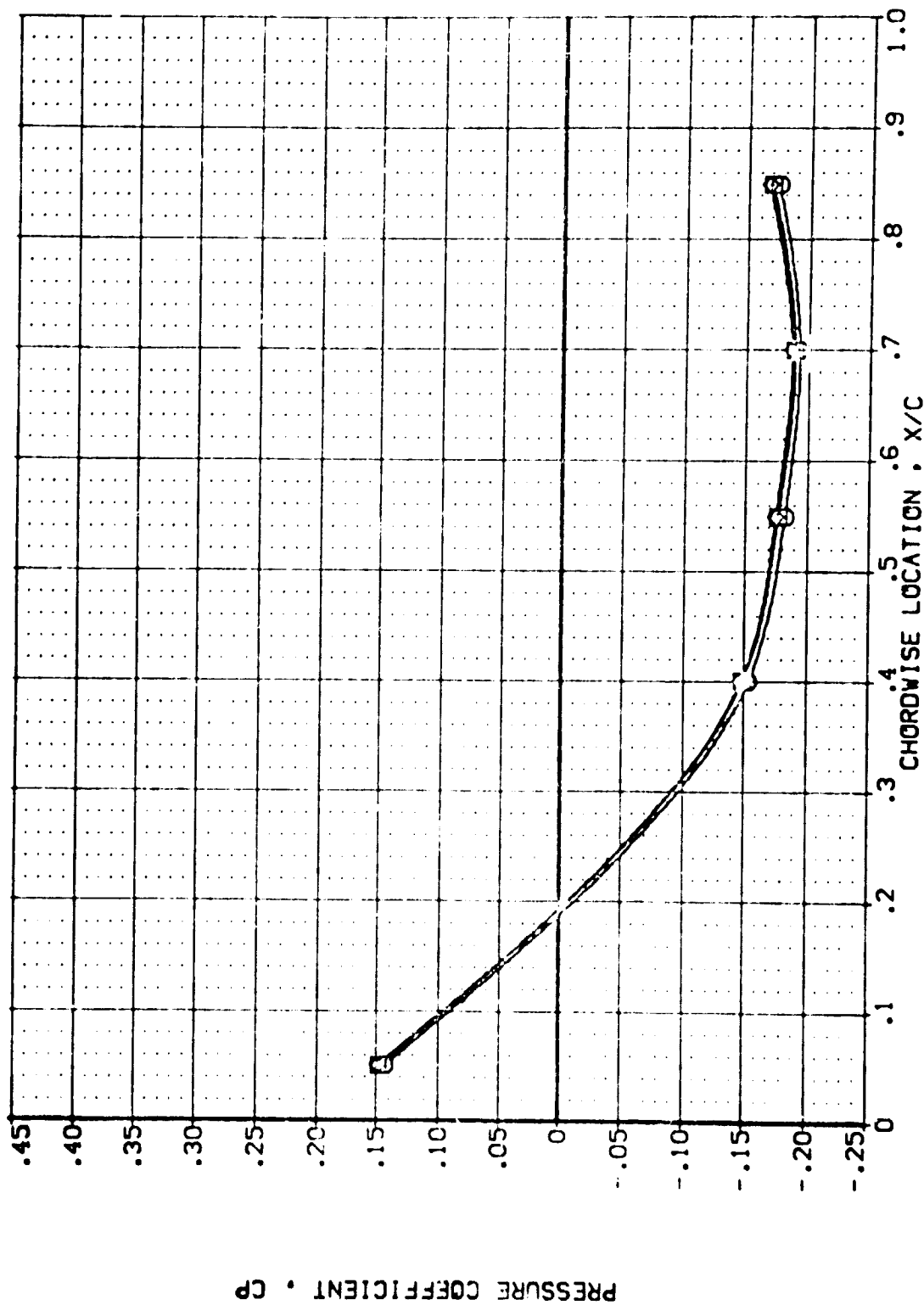


ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB20037) AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE 1.000 GIMBAL
 (UB20078) AVES 87-710 1A12C 03 T1 S1 UPPER WING PRESSURE 1.000
 (UB20082) AVES 87-710 1A12C 04 T1 S1 UPPER WING PRESSURE 1.000 .916 .916



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB12007)
(UB12078)
(UB12082)

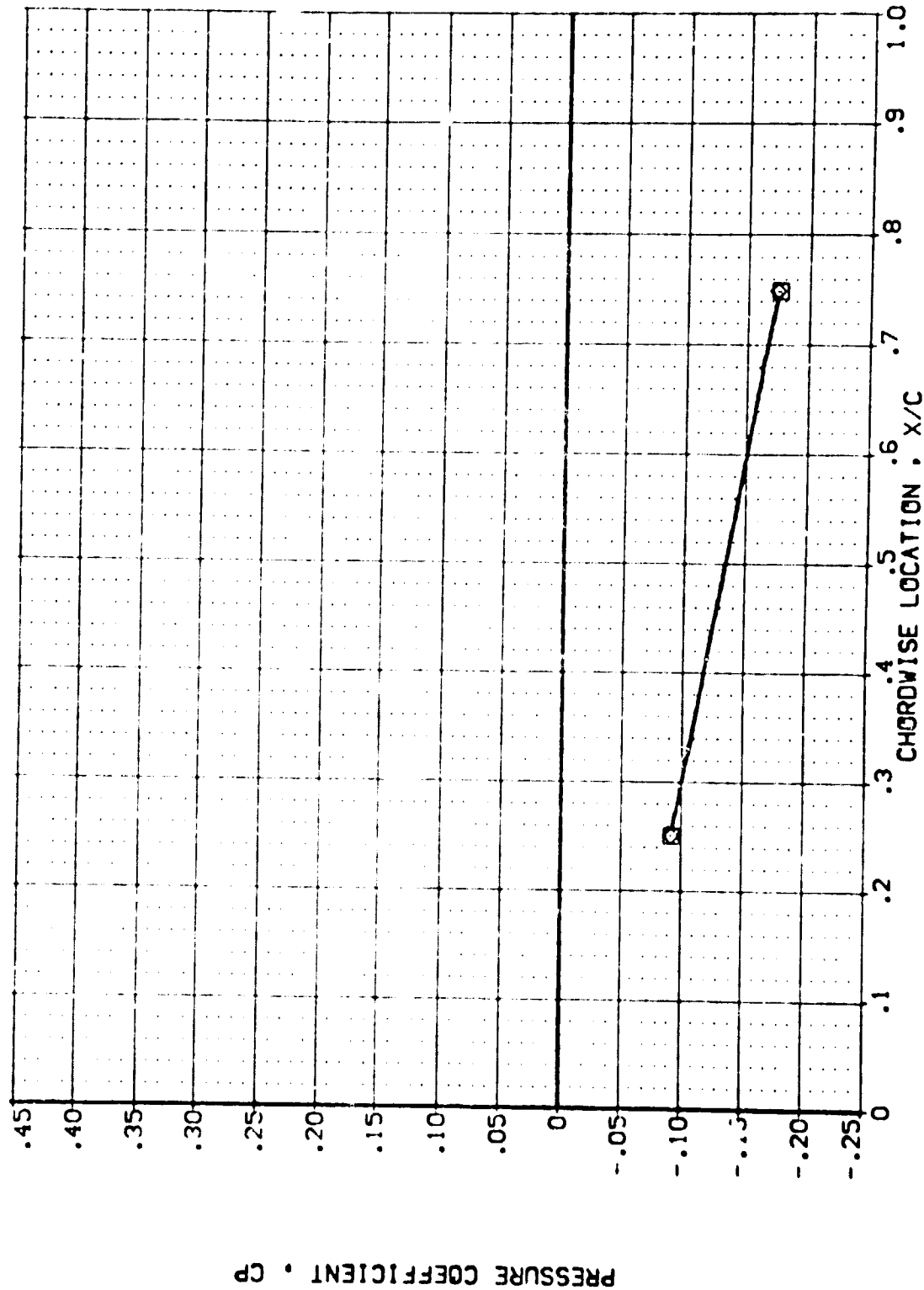
AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 03 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 04 T1 S1 UPPER WING PRESSURE

POWER 0.000
1.000
1.000

OPR 31.280
31.280

SR-PR .916
.916

GIMBAL 1.000
1.000
1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

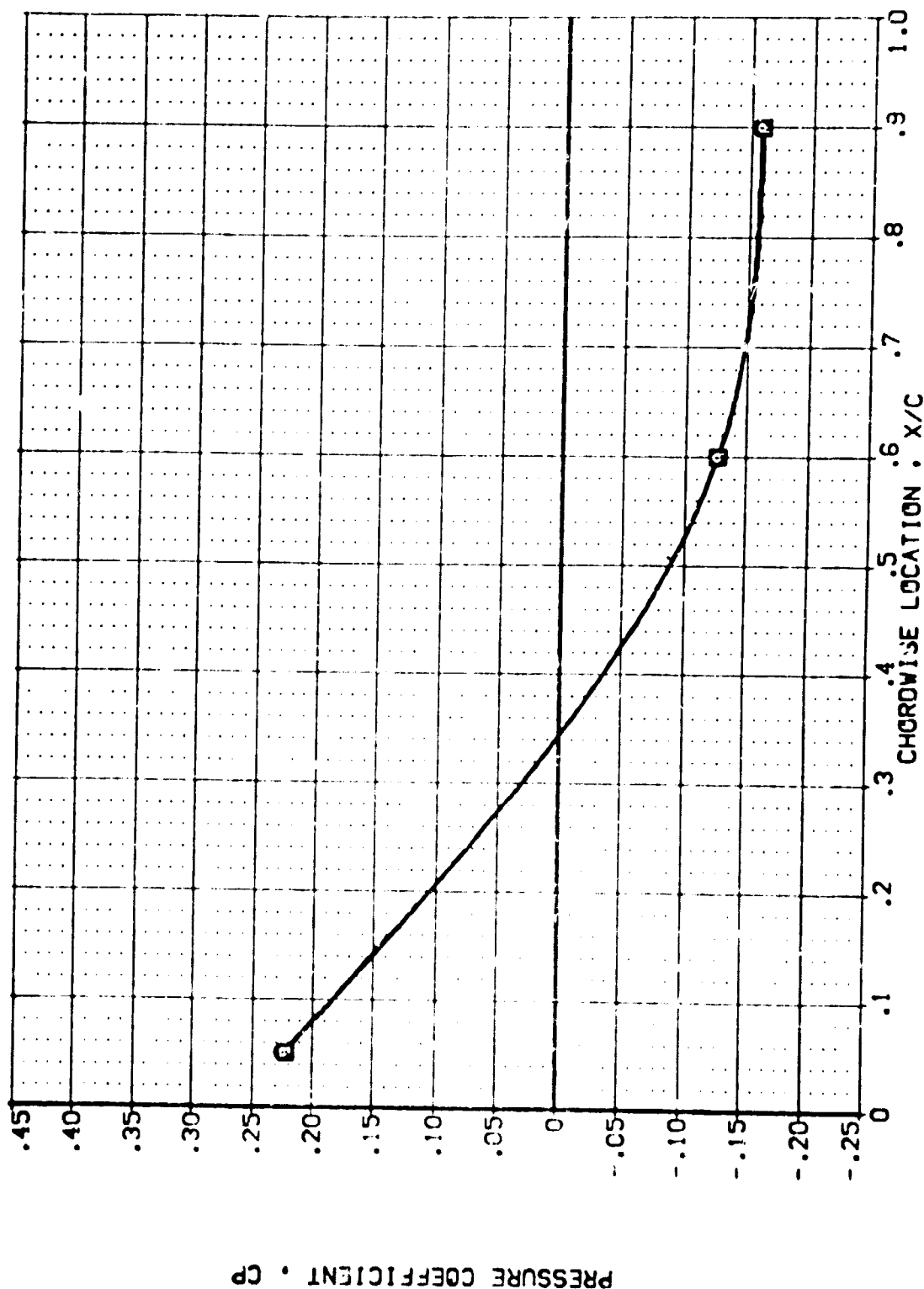
MACH = 2.500 ALPHA = 6.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/P/R GIMBAL

(UB0037) AYES 87-710 1A12C 01 T1 S1 .000 31.260 .916 1.000

(UB0078) AYES 87-710 1A12C 03 T1 S1 1.000 31.260 .916 1.000

(UB0022) AYES 87-710 1A12C 04 T1 S1 1.000 31.260 .916 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .887

C-3

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LSZ028)
(LBZ079)
(LBZ003)

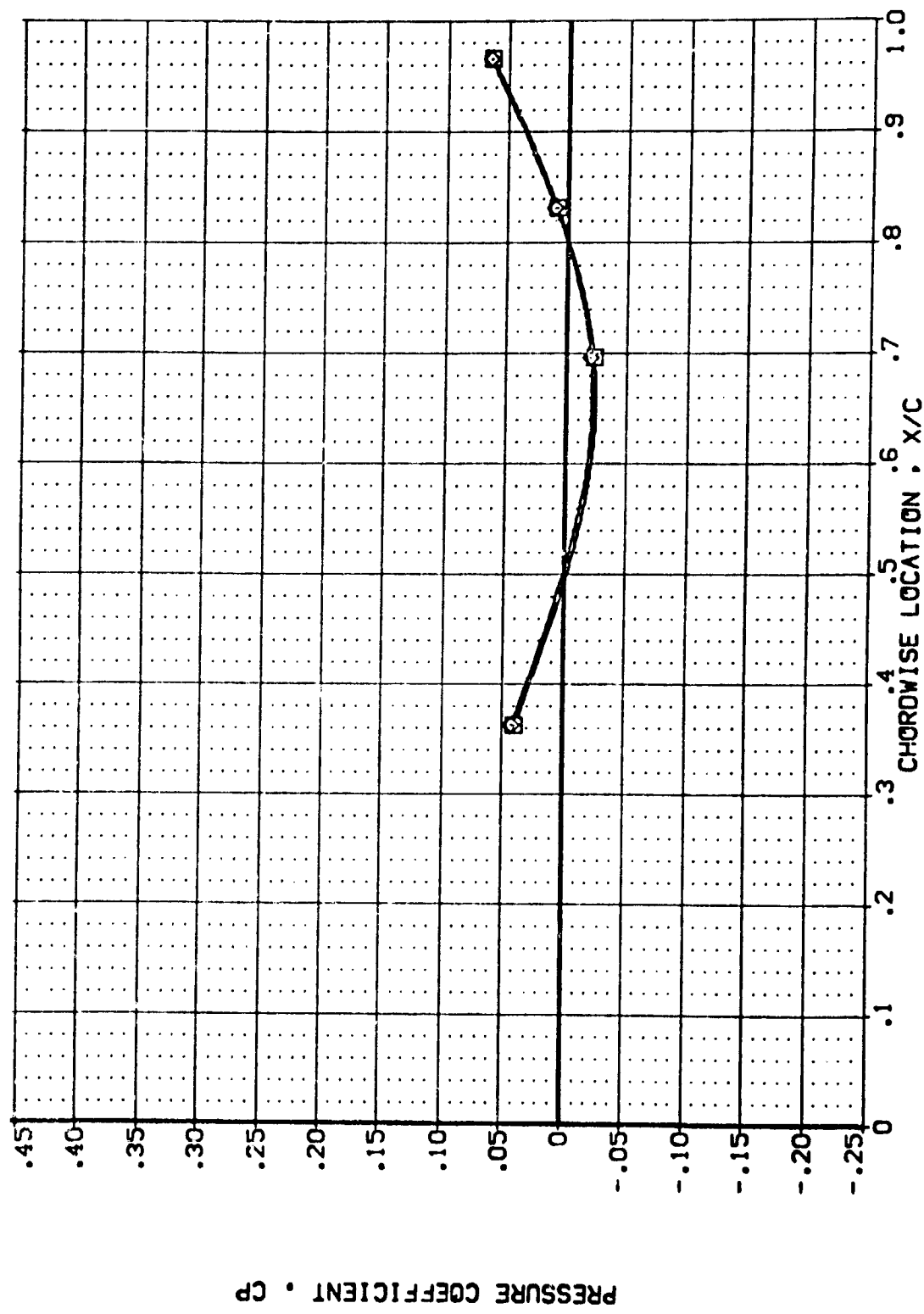
AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 03 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 04 T1 S1 UPPER WING PRESSURE

POWER .000
1.000
1.000

OPR 26.850
26.850

SWPR .768
.768

GIMBAL 1.000
1.000
1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL

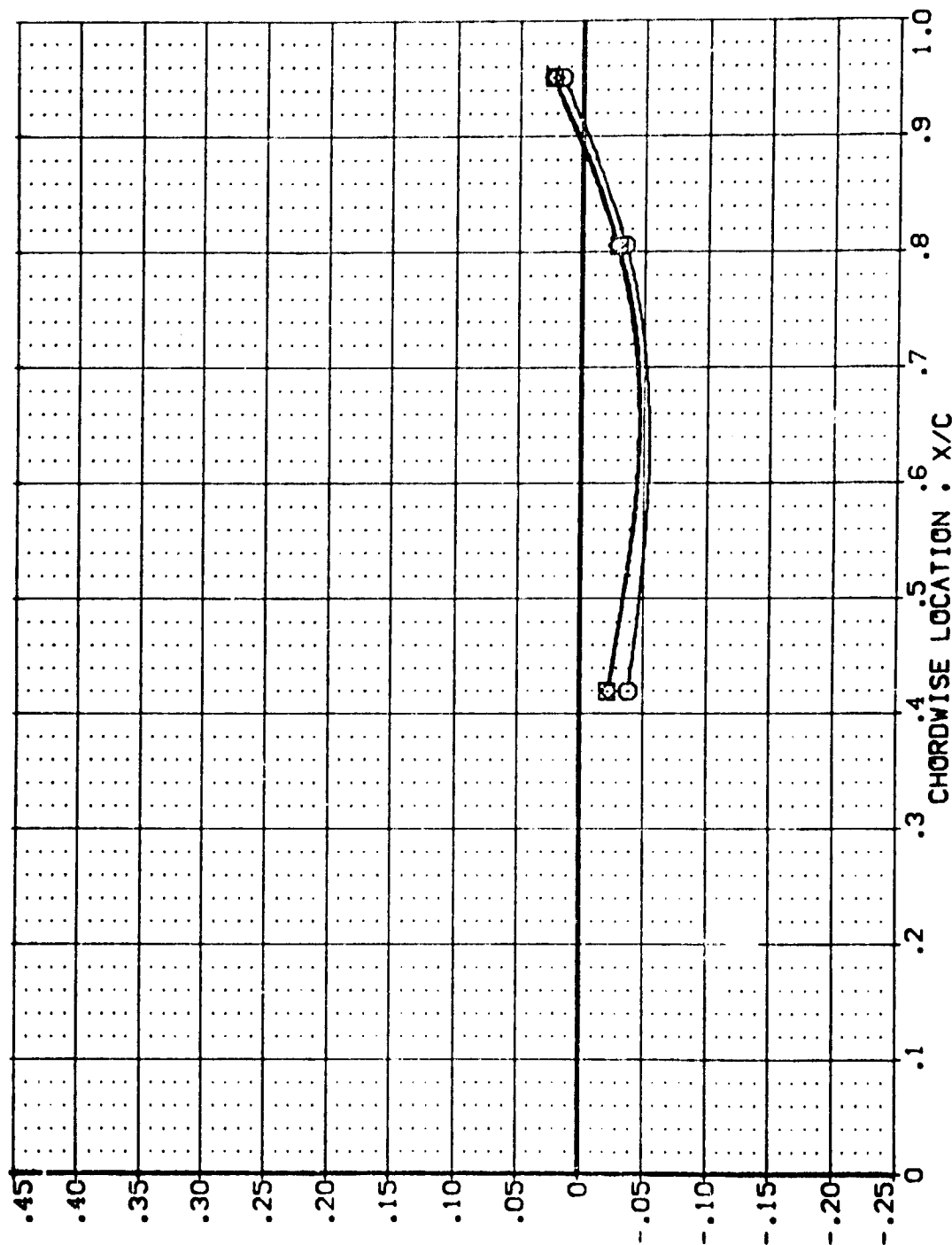
(UB2008)
(UB2079)
(UB2083)



CONFIGURATION DESCRIPTION

AVES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IALZC 03 T1 S1 UPPER WING PRESSURE
AVES 87-710 IALZC 04 T1 S1 UPPER WING PRESSURE

POWER DPR SWPR GIMBAL
.000 26.860 1.000
1.000 26.860 .768 1.000



PRESSURE COEFFICIENT, CP

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

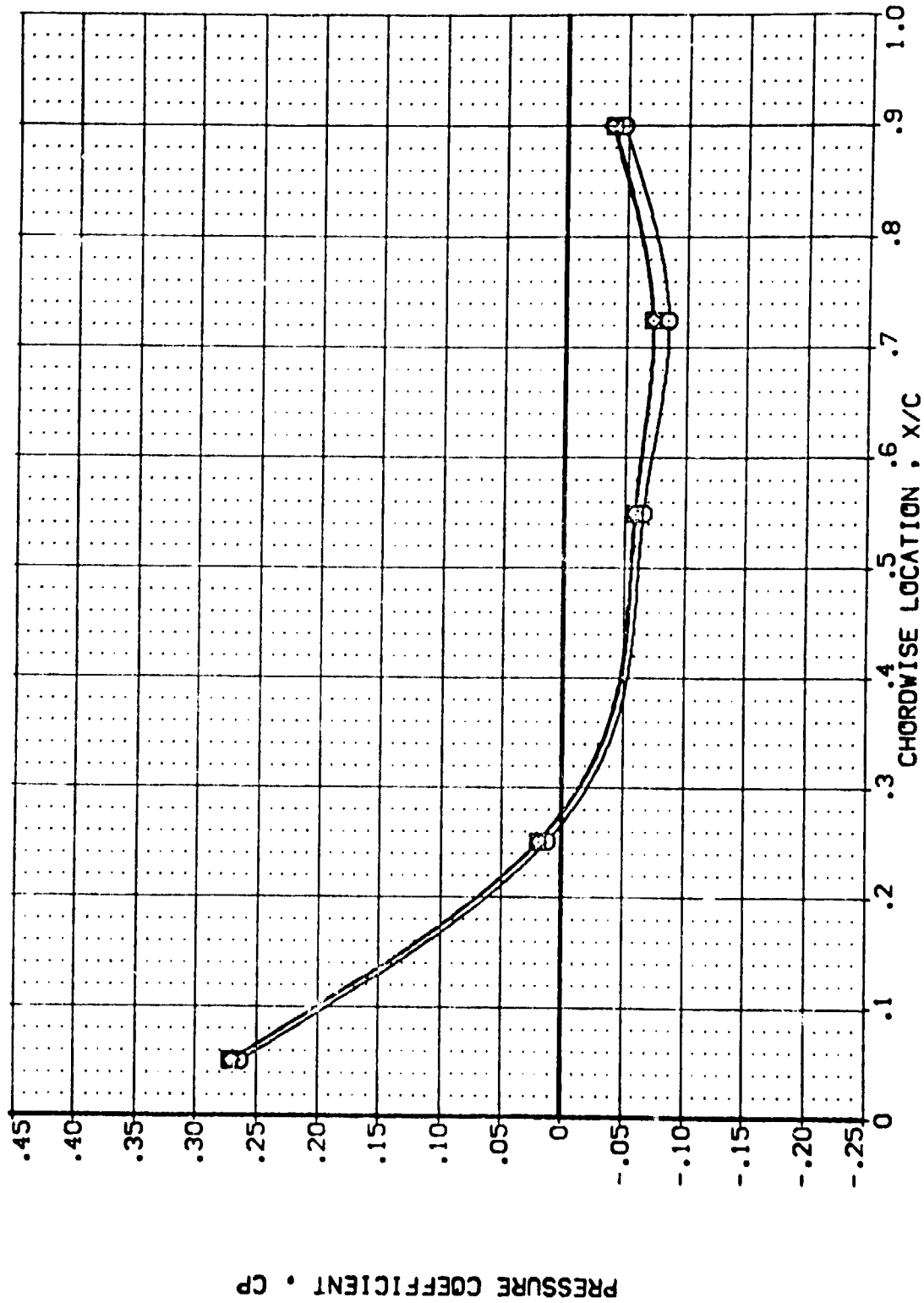
MACH = 3.000 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ008)
(UBZ078)
(UBZ088)

AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 03 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 04 T1 S1 UPPER WING PRESSURE

POWER C/PR S/P/R GIMBAL
.000 26.860 1.000
1.000 26.860 .768
1.000 26.860 .768

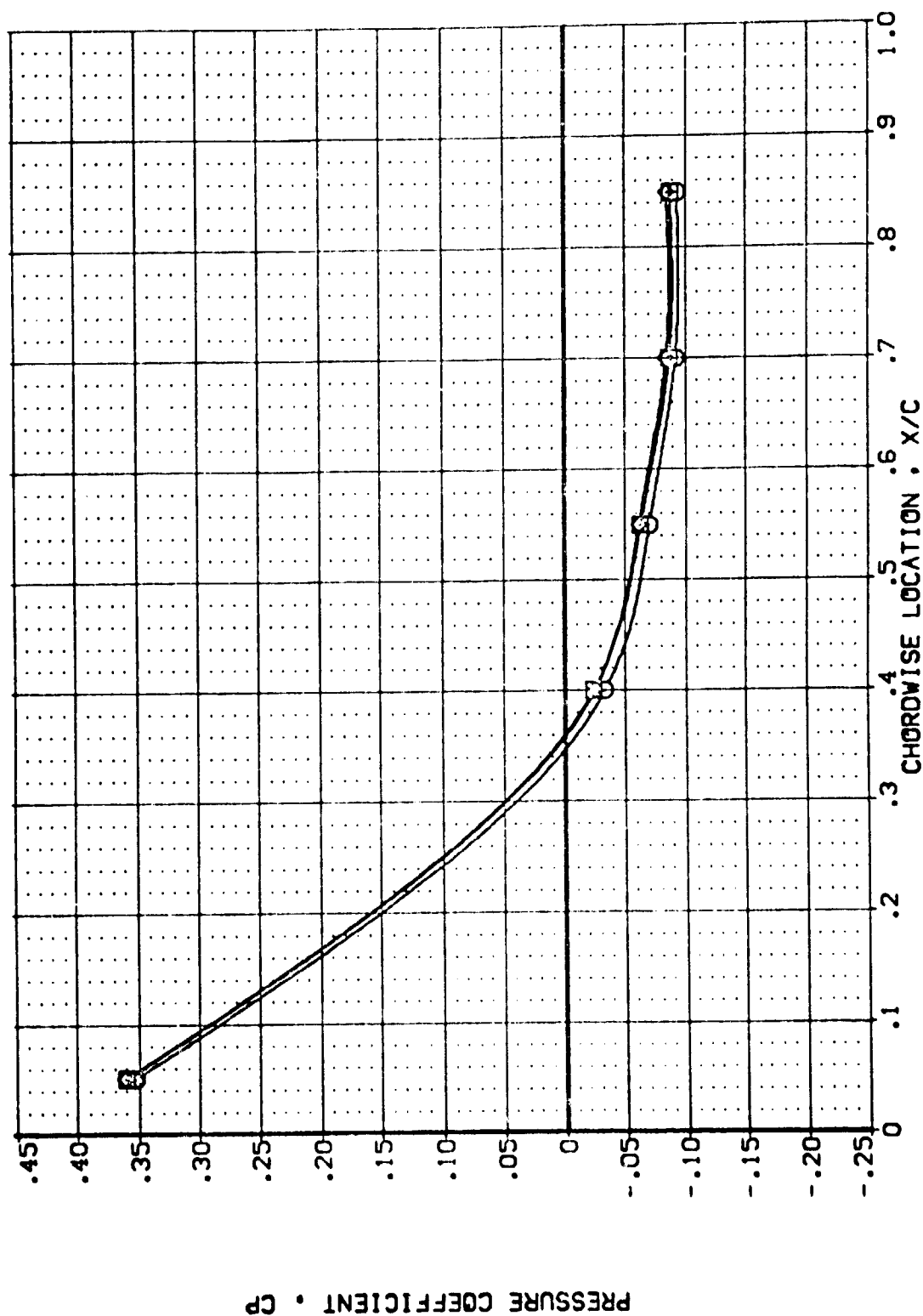


ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZD08) AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (UBZD09) AVES 87-710 1A12C 03 T1 S1 UPPER WING PRESSURE
 (UBZD08) AVES 87-710 1A12C 04 T1 S1 UPPER WING PRESSURE

POWER GPR SFRFR GIMBAL
 .000 26.860 .768 1.000
 1.000 26.860 .768 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(L82008)
(L82009)
(L82010)

AVES 87-710
AVES 87-710
AVES 87-710

IA12C D1 T1 S1
IA12C D3 T1 S1
IA12C D4 T1 S1

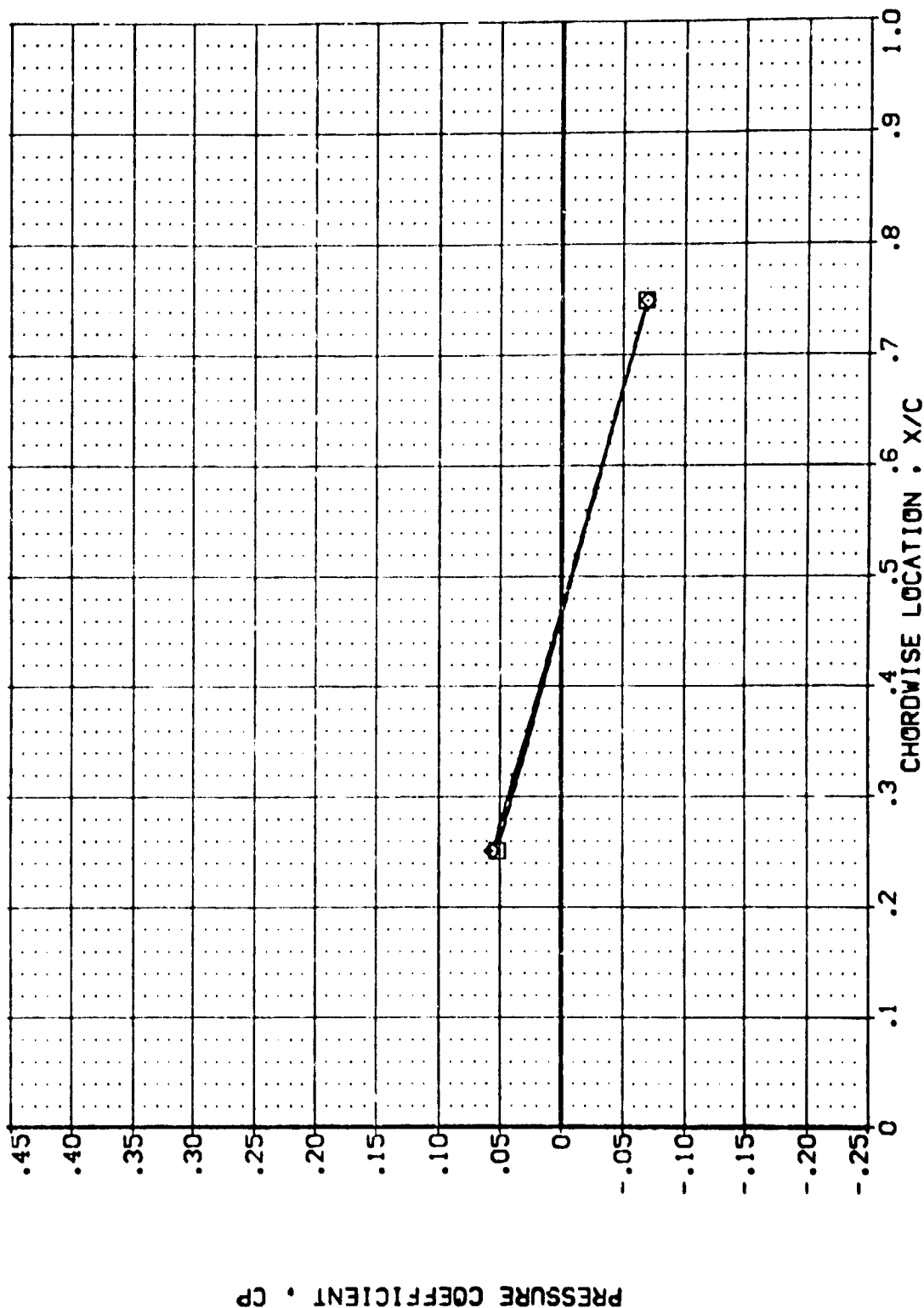
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER
.000
1.000
1.000

OPR
26.050
26.860

SRPR
.768
.768

GIMBAL
1.000
1.000
1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

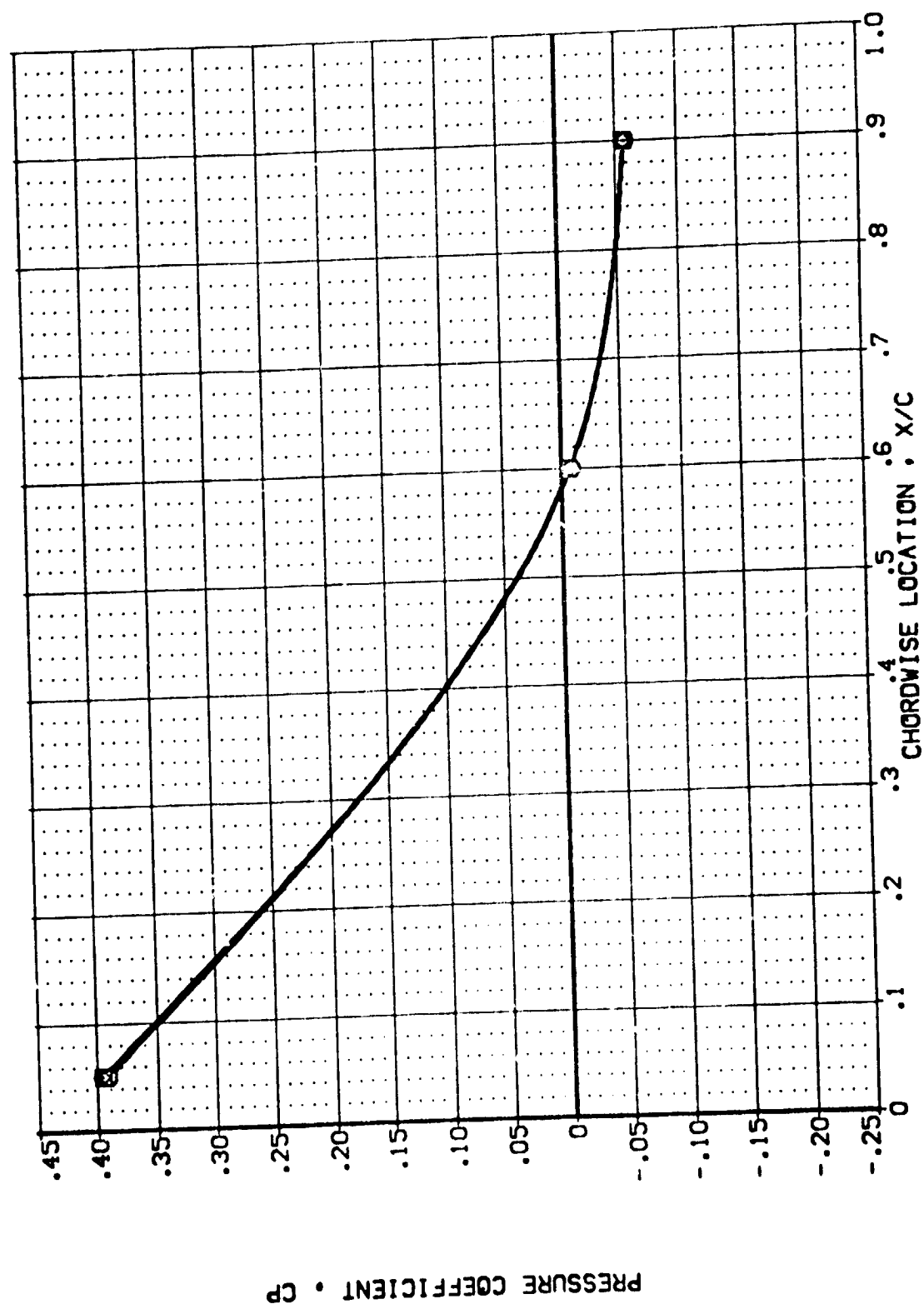
MACH = 3.000 ALPHA = -8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER DFR SFRPR GIMBAL

(UB20038) ARES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE 1.000 26.860 .768 1.000

(UB20079) ARES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE 1.000 26.860 .768 1.000

(UB20083) ARES 87-710 IAI2C 04 T1 S1 UPPER WING PRESSURE 1.000 26.860 .768 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -9.000 Y/B = .887 PAGE 96

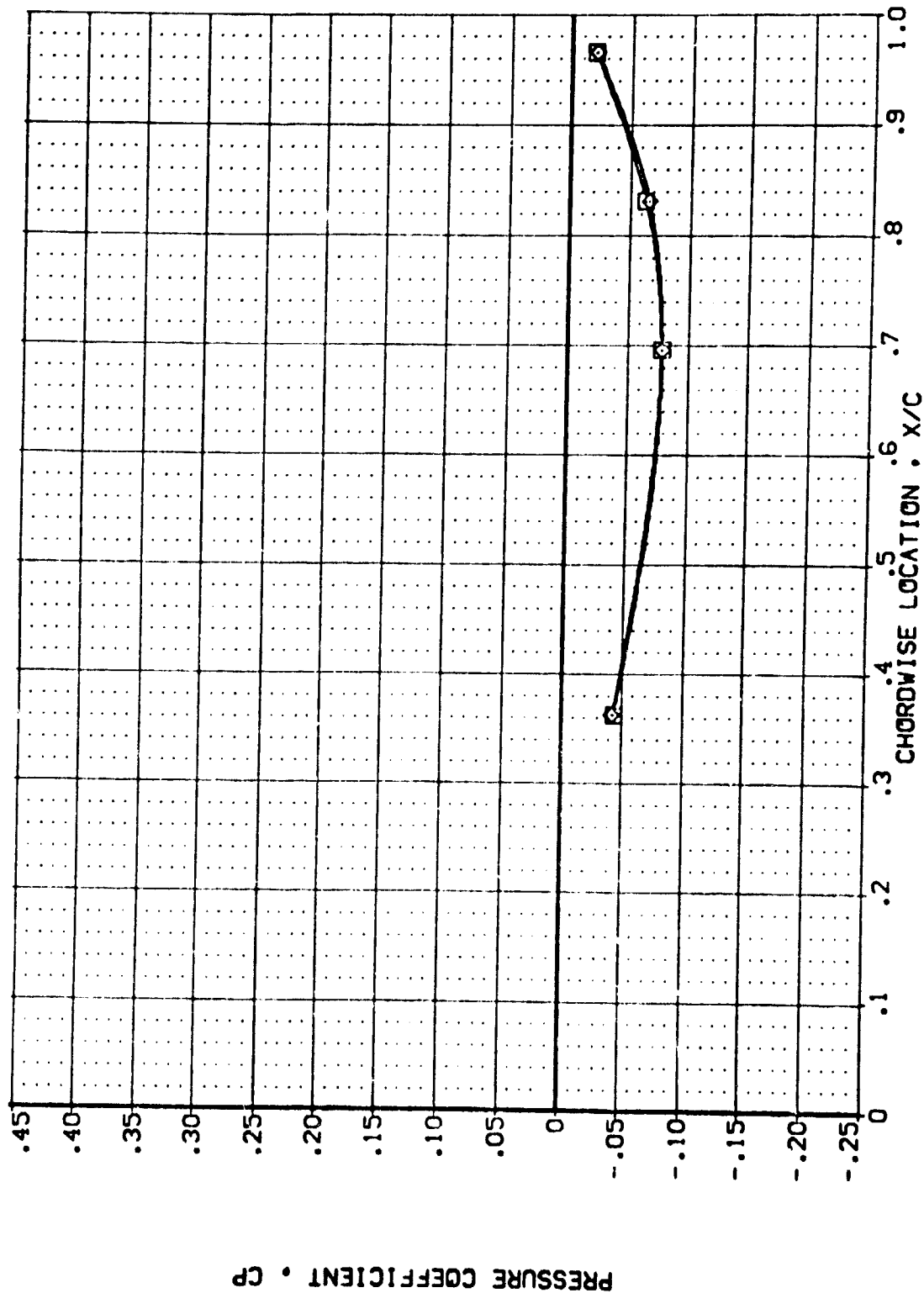
DATA SET SYMBOL: (UB2008) (UB2078) (UB2083)

CONFIGURATION DESCRIPTION: AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 AYES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE
 AYES 87-710 IAI2C 04 T1 S1 UPPER WING PRESSURE

POWER: .000 26.860
 .000 26.860

SPR: .768 .768

GIMBAL: 1.000 1.000 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .299

DATA SET SYMBOL

(UB20038)
(UB20079)
(UB20083)

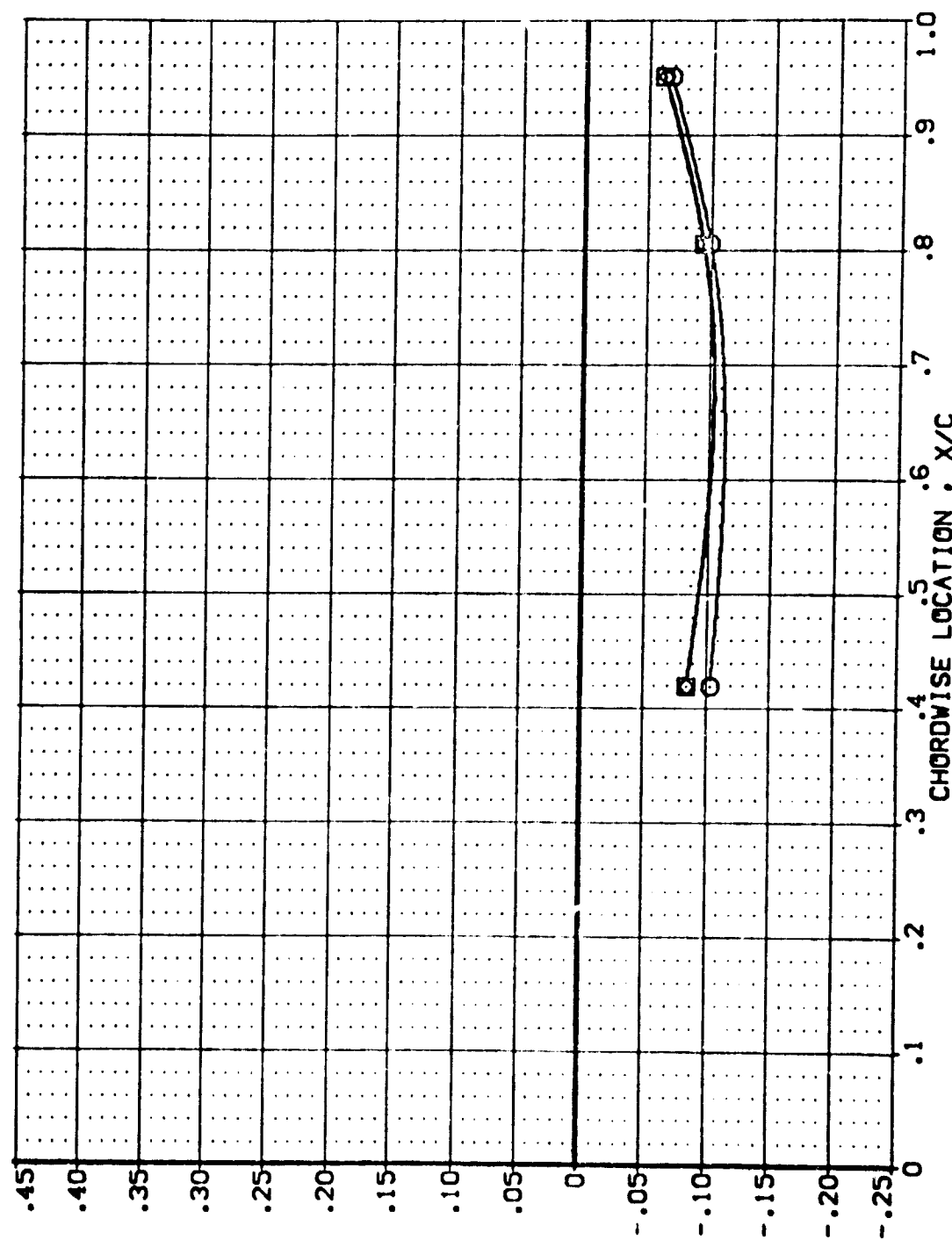
AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 TI SI
IA12C 03 TI SI
IA12C 04 TI SI

POWER .000
DPR 26.850
DPR 26.830

SNPR .768
SNPR .768

GIMBAL 1.000
GIMBAL 1.000
GIMBAL 1.000

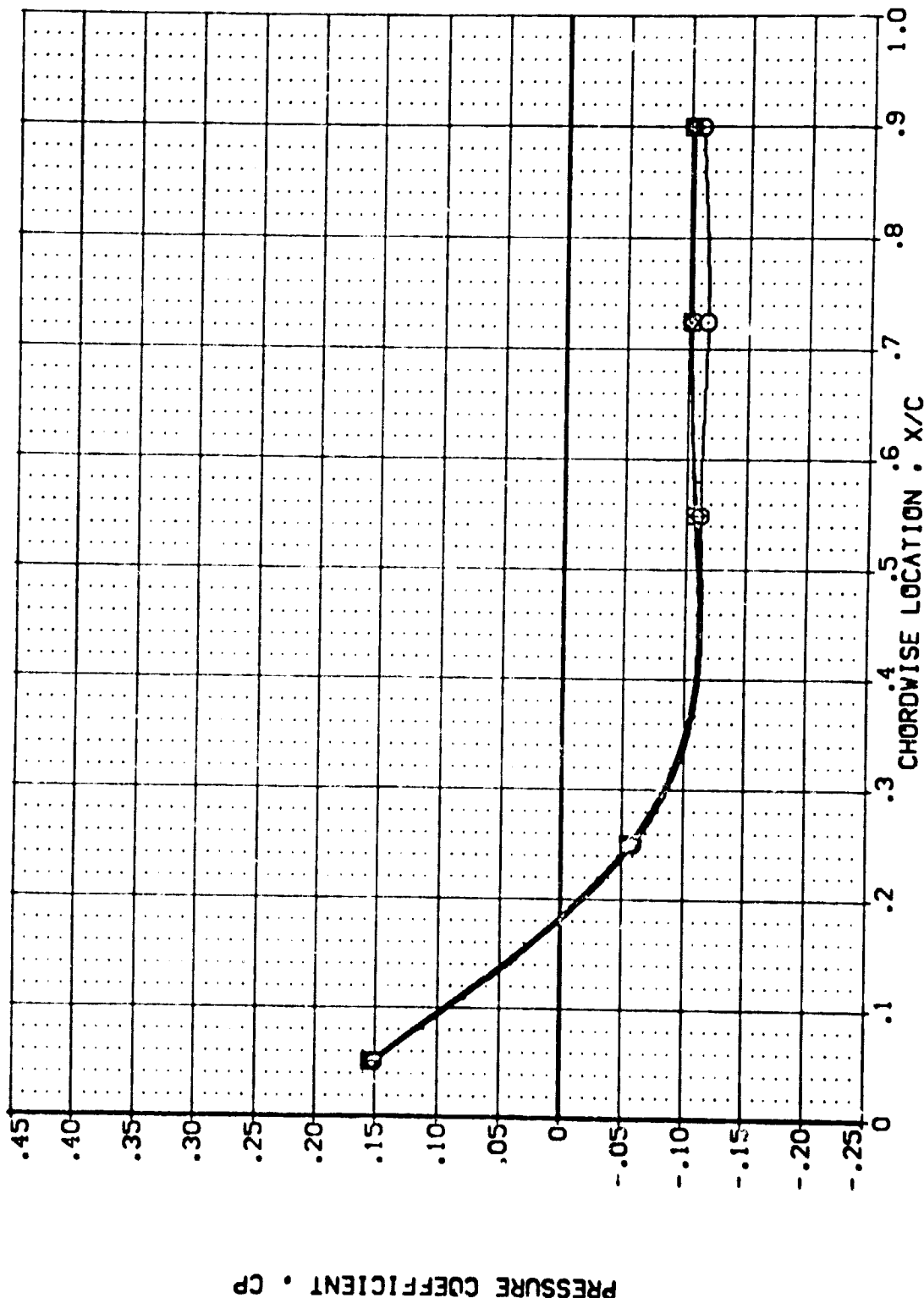


ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .427

DATA SET SYMBOL: (LB2008) (LB2079) (LB2083)

CONFIGURATION DESCRIPTION	POWER	OPR	SWPR	GIMBAL
AVES 87-710	.000	26.860	.768	1.000
AVES 87-710	1.000	26.860	.768	1.000
AVES 87-710	1.000	26.860	.768	1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .534

DATA SET SYMBOL

(UB2008)
(UB2009)
(UB2010)

AVES 87-710
AVES 87-710
AVES 87-710

IAIZC 01 T1 S1
IAIZC 03 T1 S1
IAIZC 04 T1 S1

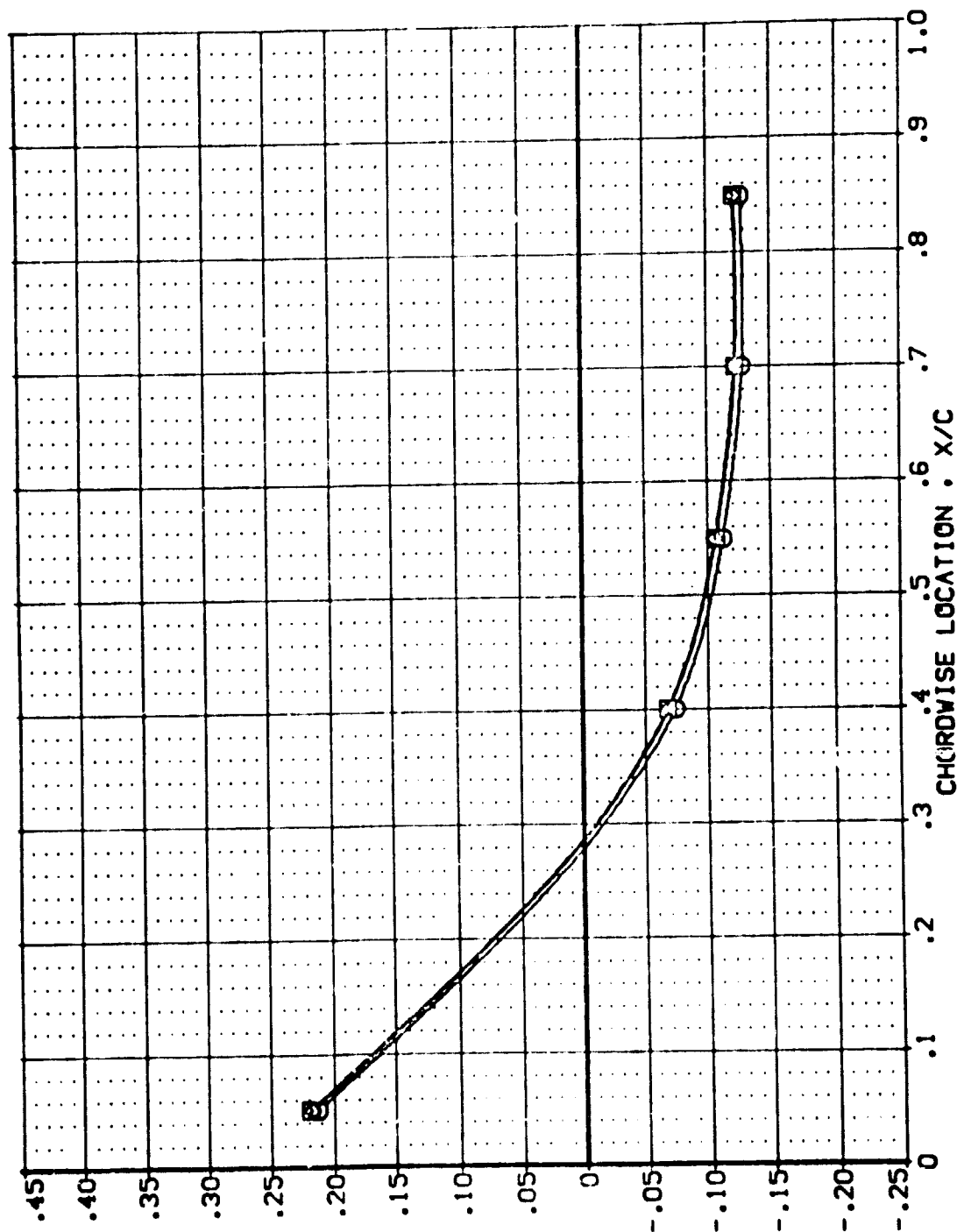
POWER
.000
1.000
1.000

OPR
26.860
26.860

50-PR
.768
.768

GIMBAL
1.000
1.000
1.000

PRESSURE COEFFICIENT - CP

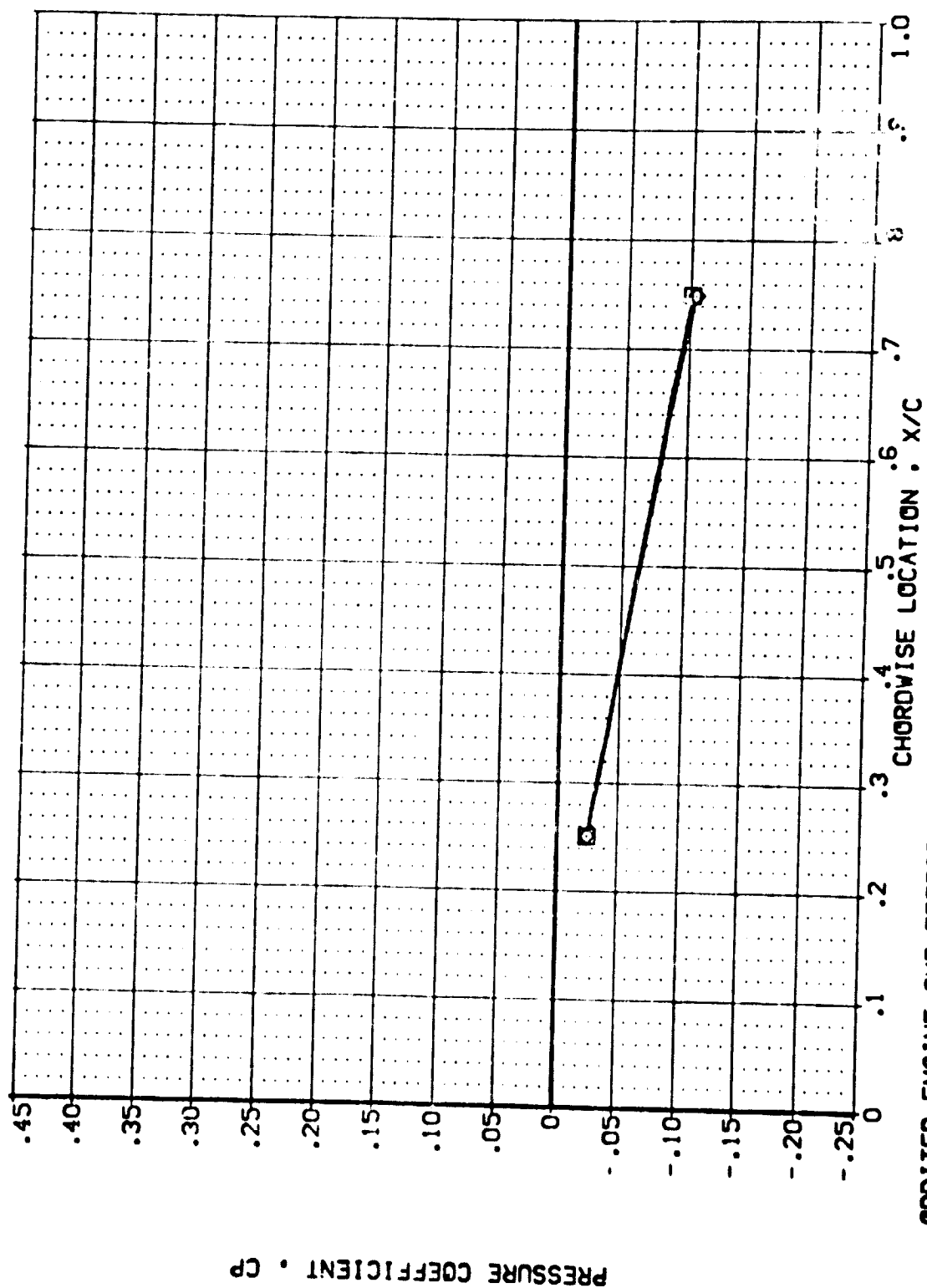


ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ030)	AVES 87-710	IA12C 01 T1 S1	UPPER WING PRESSURE	POWER	DPR	SWPR	GIMBAL
(UBZ075)	AVES 87-710	IA12C 03 T1 S1	UPPER WING PRESSURE	1.000	26.860	.768	1.000
(UBZ080)	AVES 87-710	IA12C 04 T1 S1	UPPER WING PRESSURE	1.000	26.860	.768	1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TYP

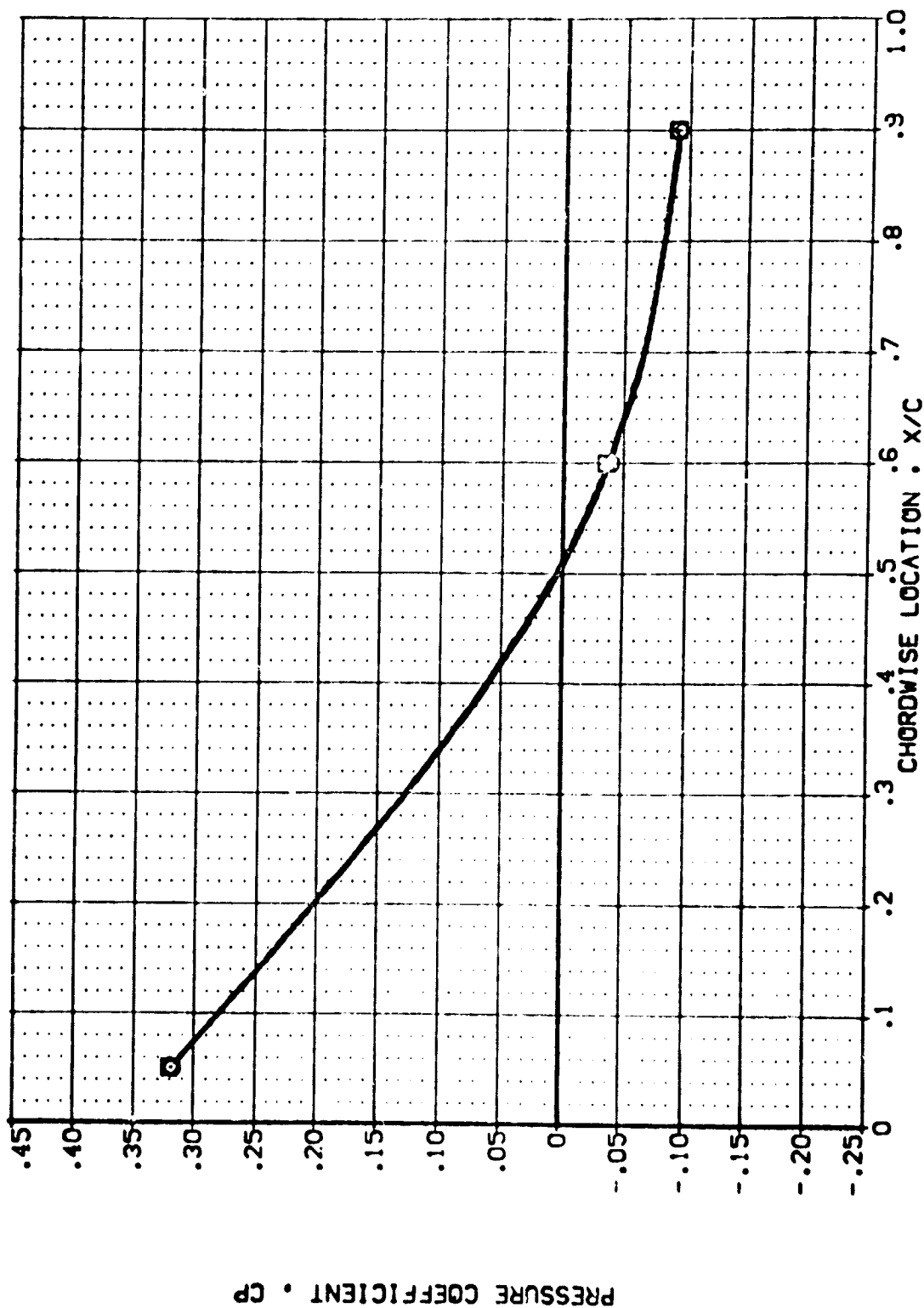
MACH = 3.000 ALPHA = .000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2008)
(UB2079)
(UB2080)

AVES 07-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 07-710 IAI2C 03 T1 S1 UPPER WING PRESSURE
AVES 07-710 IAI2C 04 T1 S1 UPPER WING PRESSURE

POWER 0.000 26.860 26.860
1.000 1.000 1.000
SWPR 0.768 0.768 0.768
Q1MBAL 1.000 1.000 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2008)
(UB2079)
(UB2083)

AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01
IA12C 03
IA12C 04

T1 S1
T1 S1
T1 S1

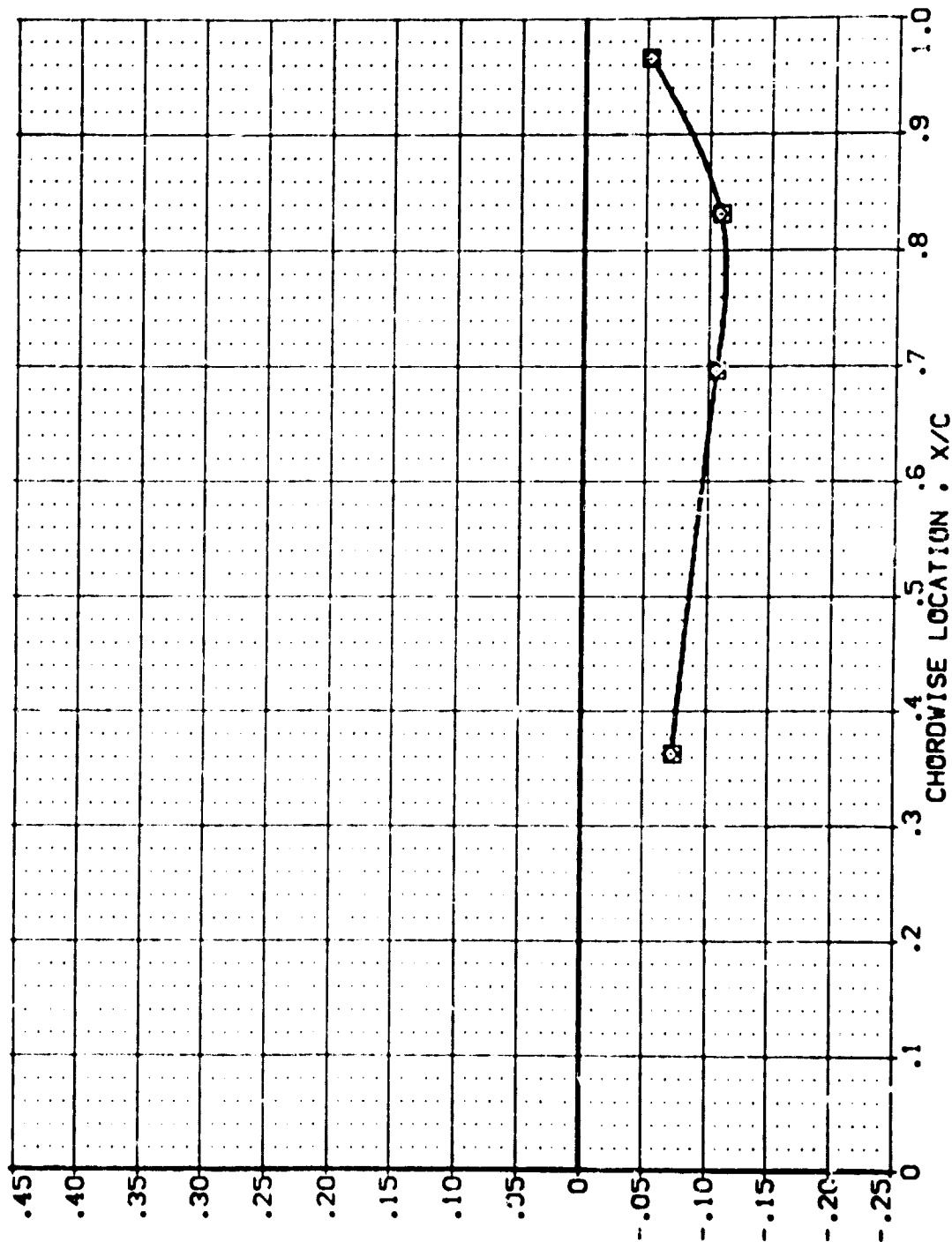
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER 0.000
POWER 1.000
POWER 1.000

CFR 26.860
CFR 26.860

SNPR .768
SNPR .768

GIMBAL 1.000
GIMBAL 1.000
GIMBAL 1.000



PRESSURE COEFFICIENT, CP

CHORDWISE LOCATION, X/C

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .299

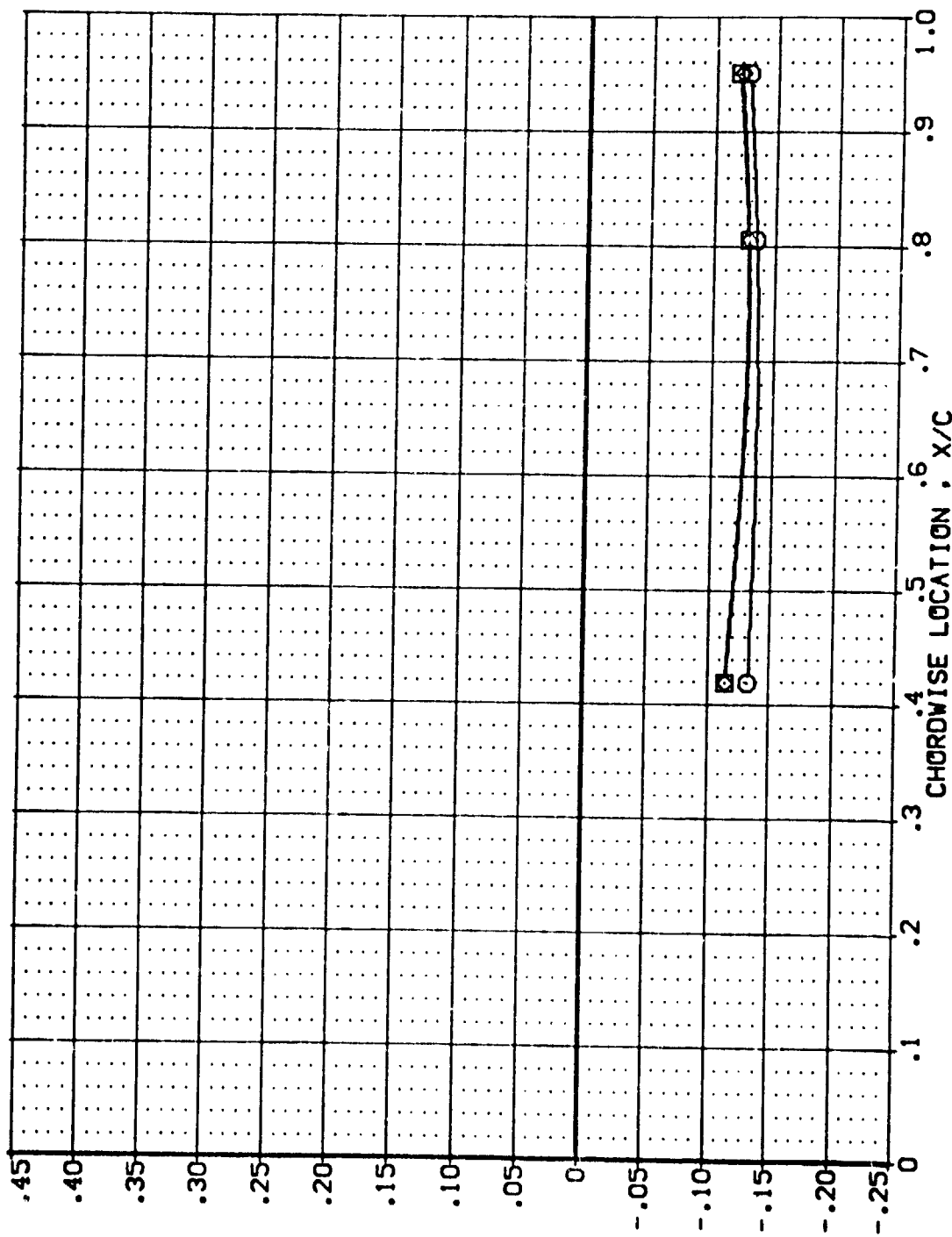
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2008)
(UB2079)
(UB2083)



AVES 87-710 IAI2C 01 TI SI UPPER WING PRESSURE
AVES 87-710 IAI2C 03 TI SI UPPER WING PRESSURE
AVES 87-710 IAI2C 04 TI SI UPPER WING PRESSURE

POWER 0.000 26.860 26.860
GIMBAL 1.000 1.000 1.000
SRPR .738 .768



PRESSURE COEFFICIENT, CP

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

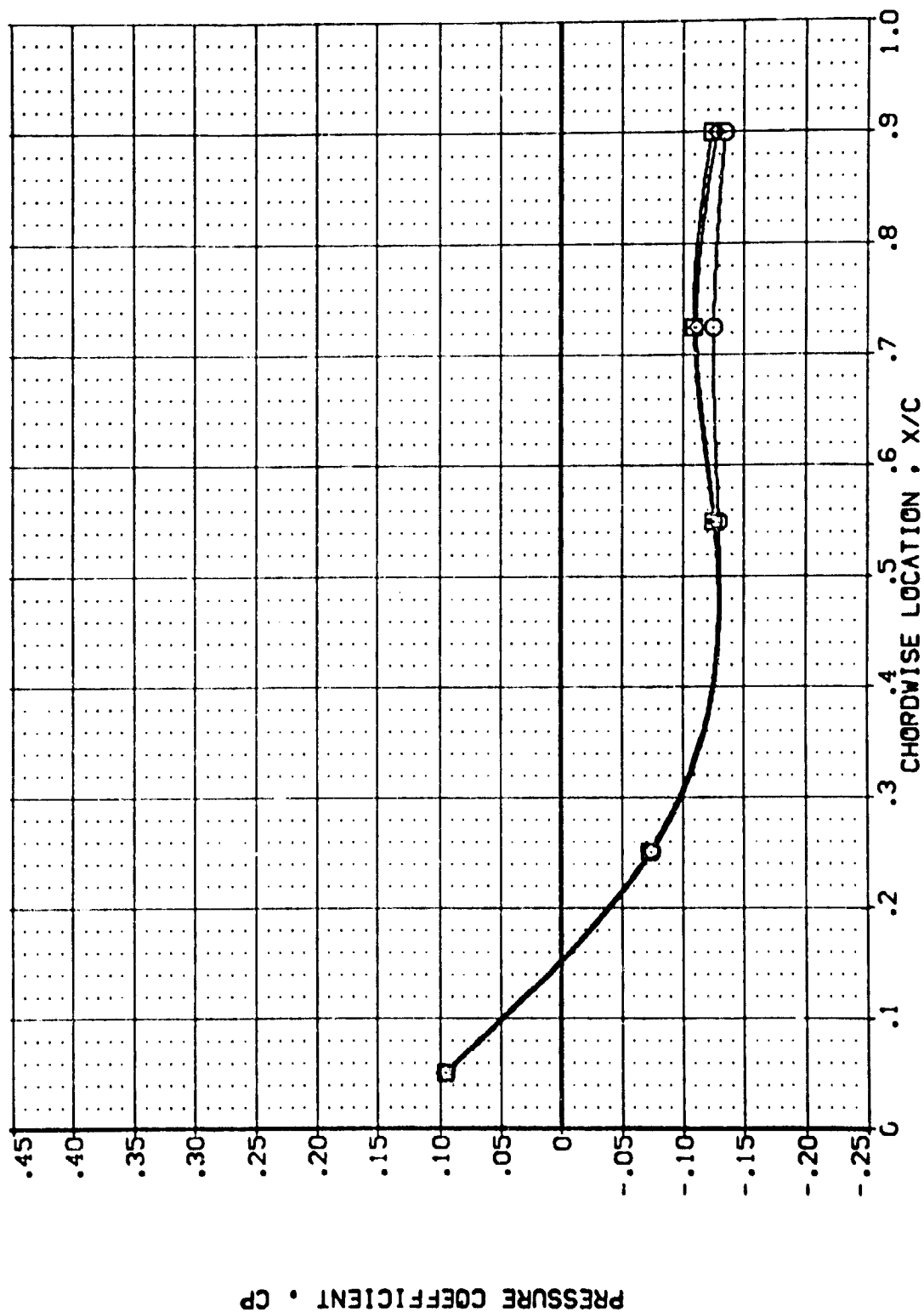
MACH = 3.000 ALPHA = 8.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER DPR SPPR GIMBAL

(UBZ008) ASES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE .000 26.860 .768 1.000

(UBZ009) ASES 87-710 IALZC 03 T1 S1 UPPER WING PRESSURE 1.000 26.860 .768 1.000

(UBZ003) ASES 87-710 IALZC 04 T1 S1 UPPER WING PRESSURE 1.000 26.860 .768 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZD08)
(UBZD07)
(UBZD06)

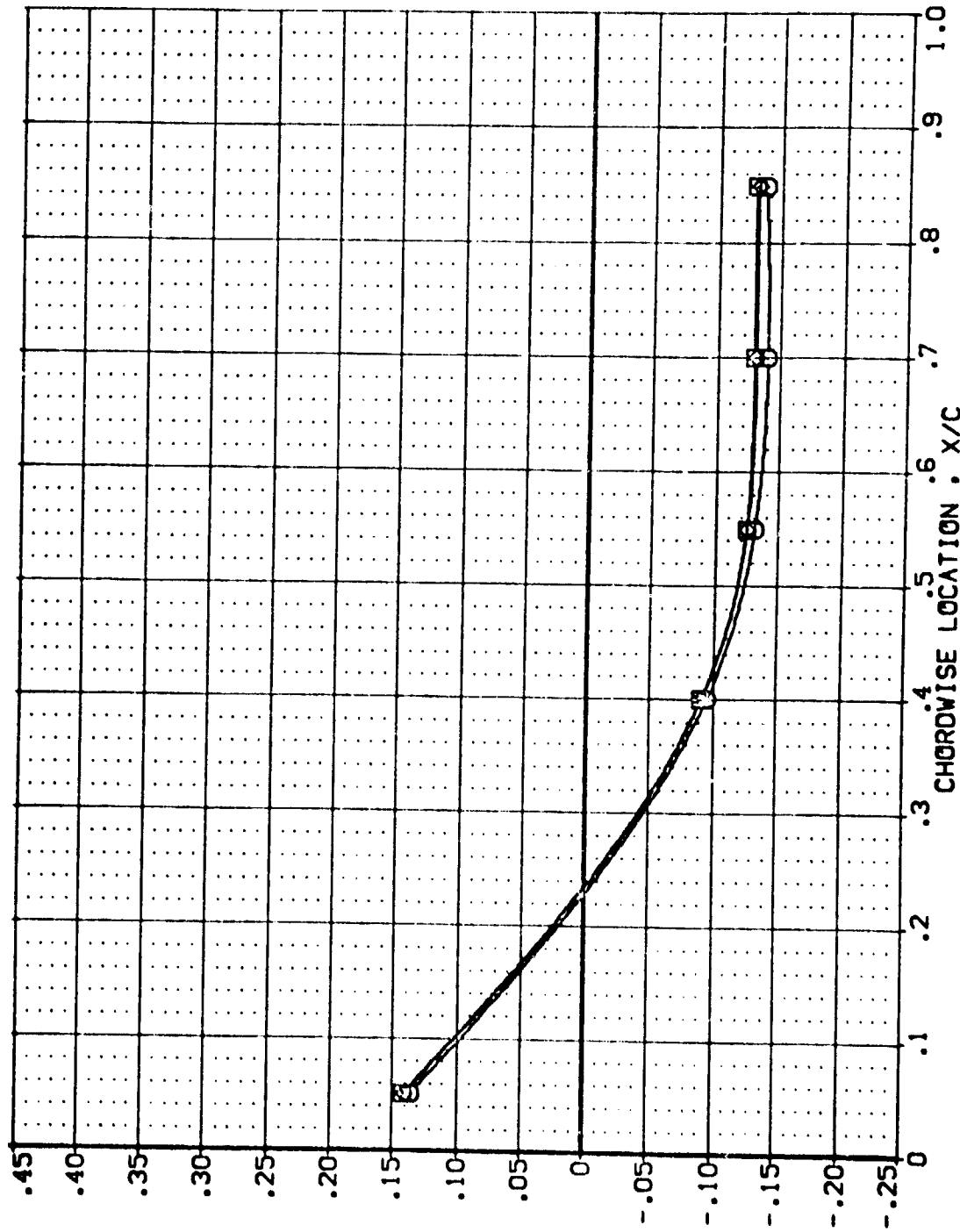
AMES 87-710
AMES 87-710
AMES 87-710

IA12C 01 T1 S1
IA12C 03 T1 S1
IA12C 04 T1 S1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER C/P SR-PR 01MBAL
.000
1.000 26.860
1.000 26.860

01MBAL
1.000
1.000



PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .673

DATA SET SYMBOL

(U82008)
(U82079)
(U82083)

CONFIGURATION DESCRIPTION

AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 04 T1 S1 UPPER WING PRESSURE

POWER

.000
1.000
1.000

QPR

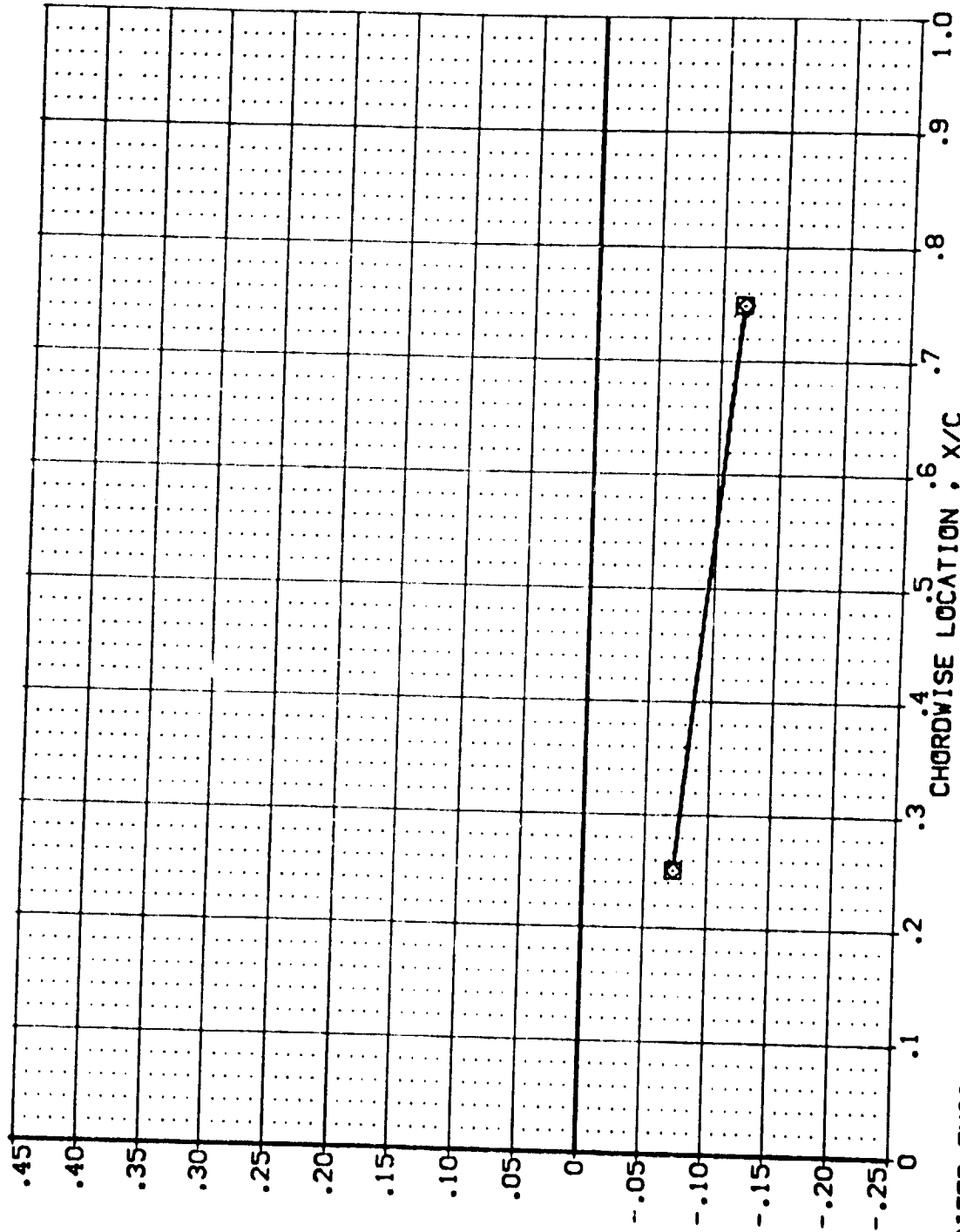
26.860
26.860

SRPR

.768
.768

QIMBAL

1.000
1.000
1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

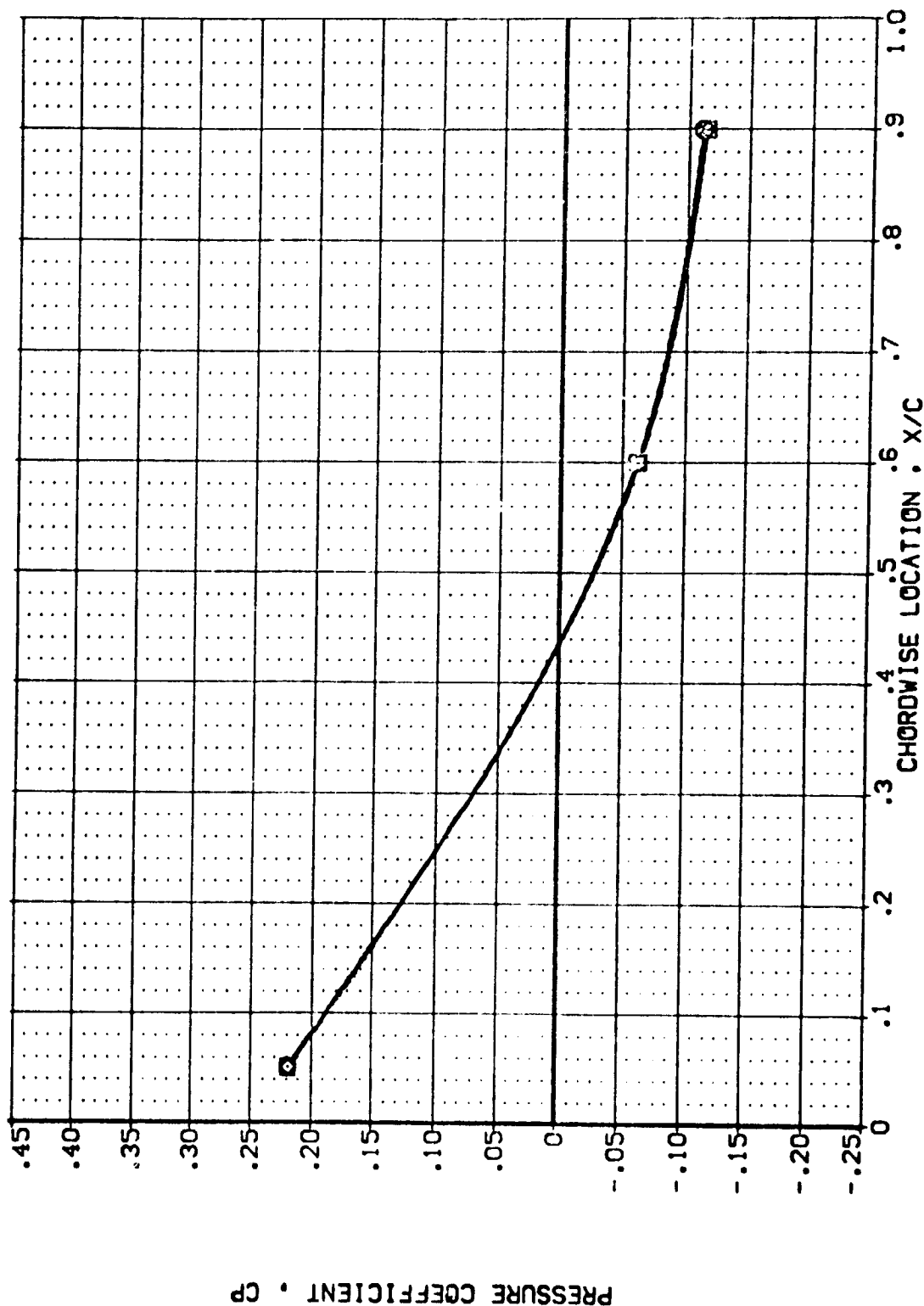
MACH = 3.000 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ038)
(UBZ079)
(UBZ060)

AVES 87-710 IAI2C 01 T1 SI UPPER WING PRESSURE
AVES 87-710 IAI2C 03 T1 SI UPPER WING PRESSURE
AVES 87-710 IAI2C 04 T1 SI UPPER WING PRESSURE

POWER 0.000 26.860 26.860
GIMBAL 1.000 1.000 1.000
SWPR .768 .768



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZD46)
(UBZD50)
(UBZD81)
(UBZD84)

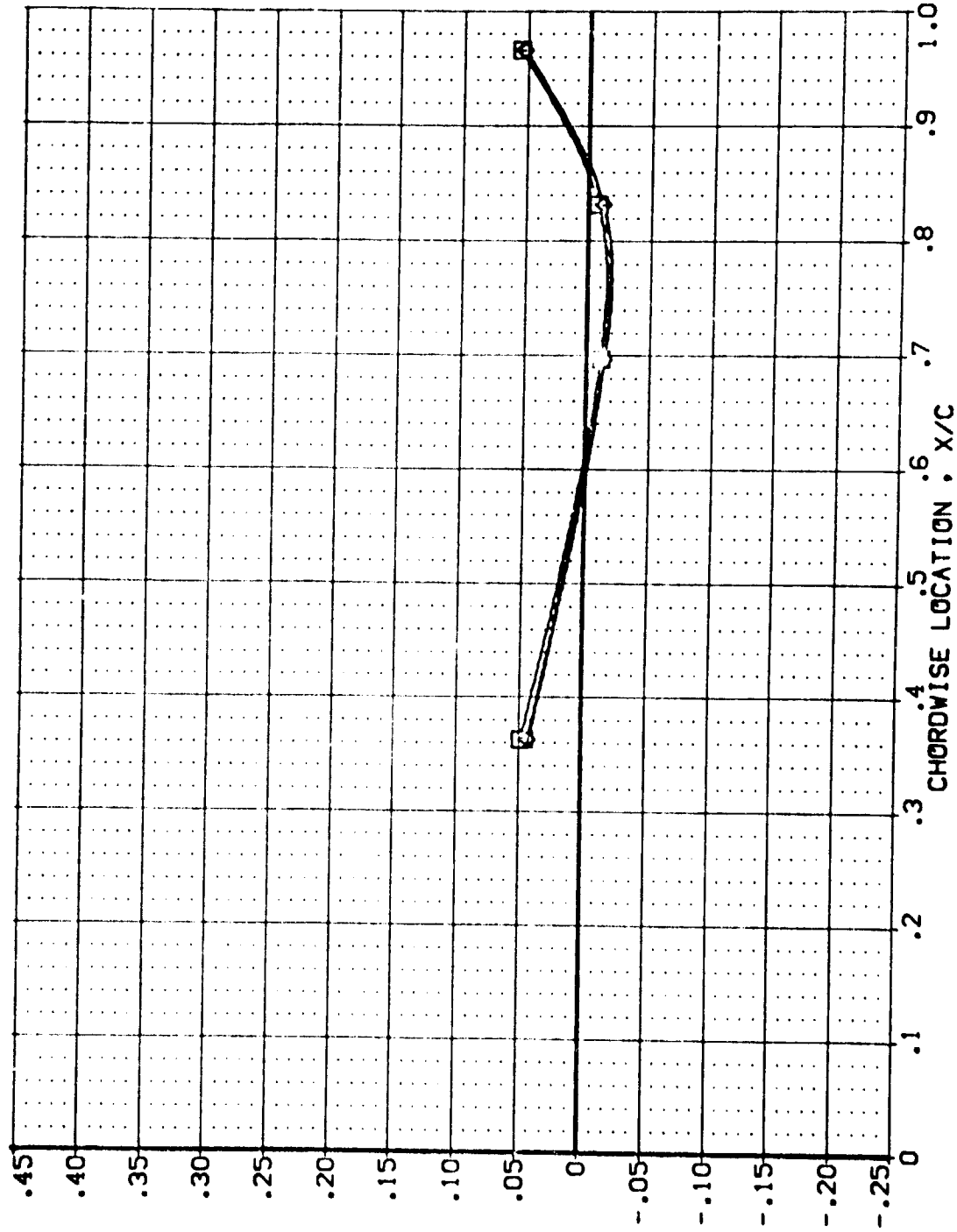
AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

AI2C 01 TI SI
AI2C 03 TI SI
AI2C 03 TI SI
AI2C 04 TI SI

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER 0.000 23.860 23.860
GIMBAL 1.000 1.000 1.000
SWPR 0.826 0.826 0.826

PRESSURE COEFFICIENT • CP



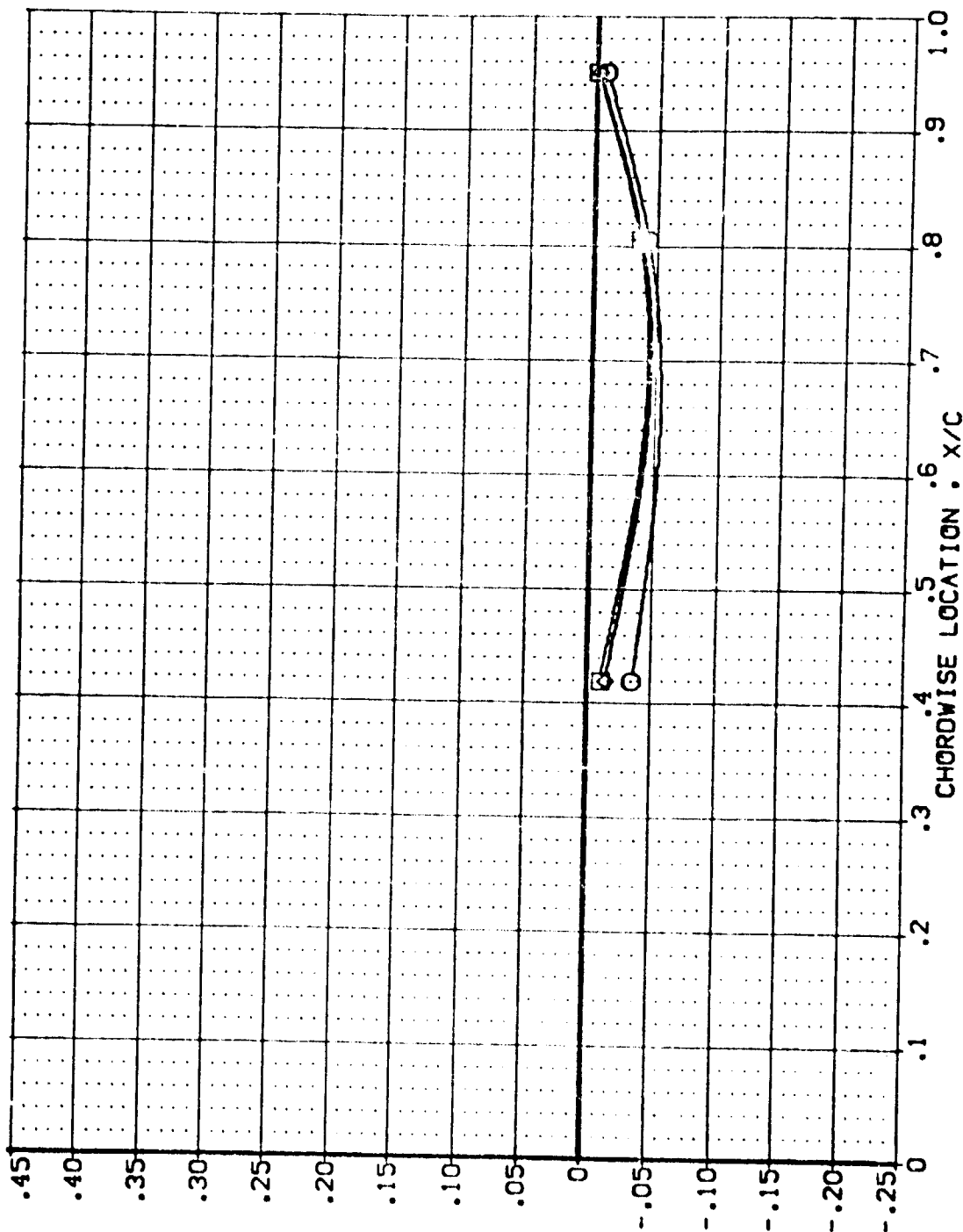
ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZD46) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZD60) AYES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE
 (UBZC31) AYES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE
 (UBZD84) AYES 87-710 IAI2C 04 T1 S1 UPPER WING PRESSURE

POWER 1.000
 DFR 23.860
 ST-PR .826
 GIMBAL 1.000



PRESSURE COEFFICIENT, CP

CHORDWISE LOCATION, X/C

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .427

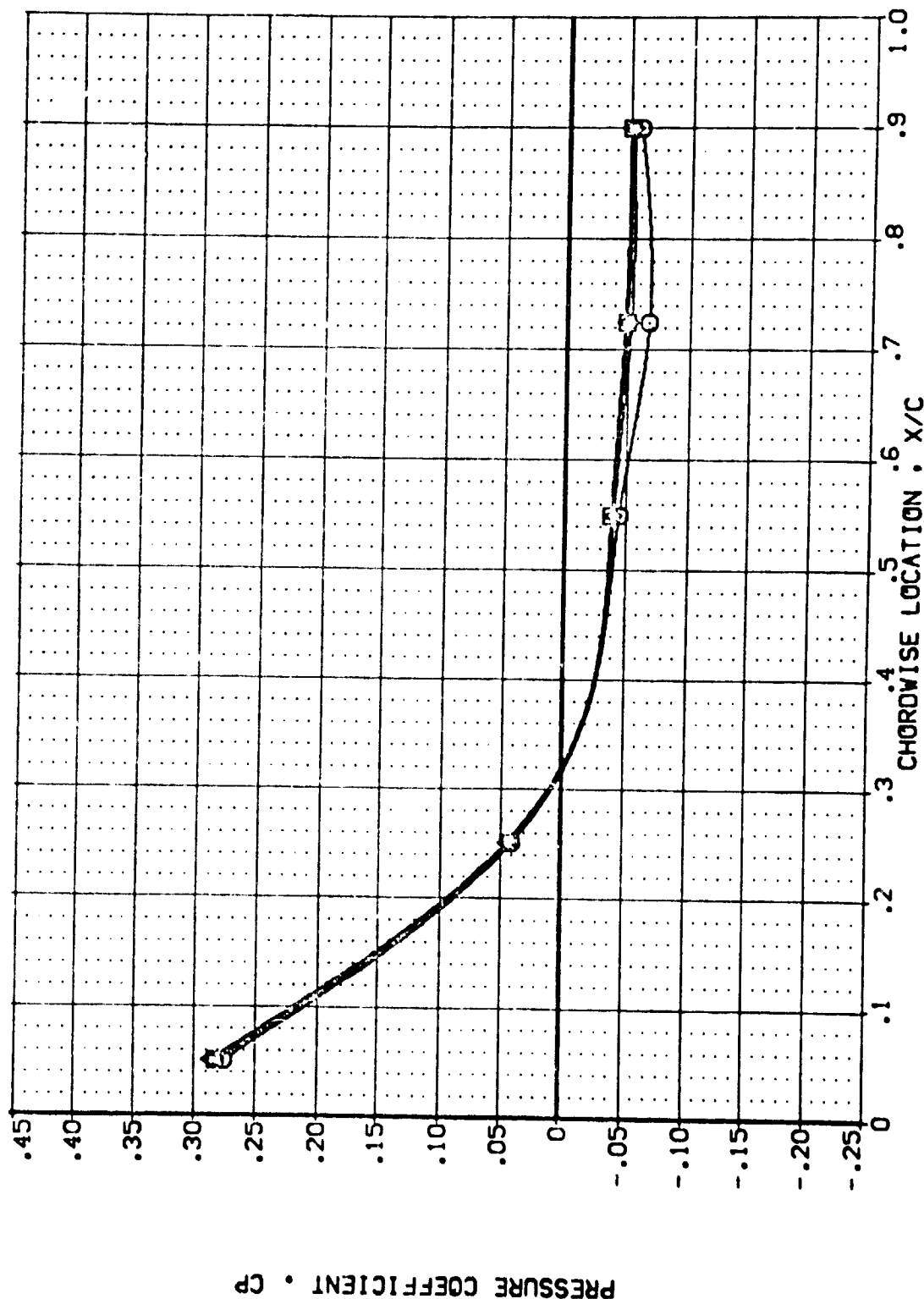
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ046)
(UBZ080)
(UBZ081)
(UBZ084)

AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER 0.000 23.860 23.860
SRPR 0.826 0.826 0.826
GIMBAL 1.000 1.000 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

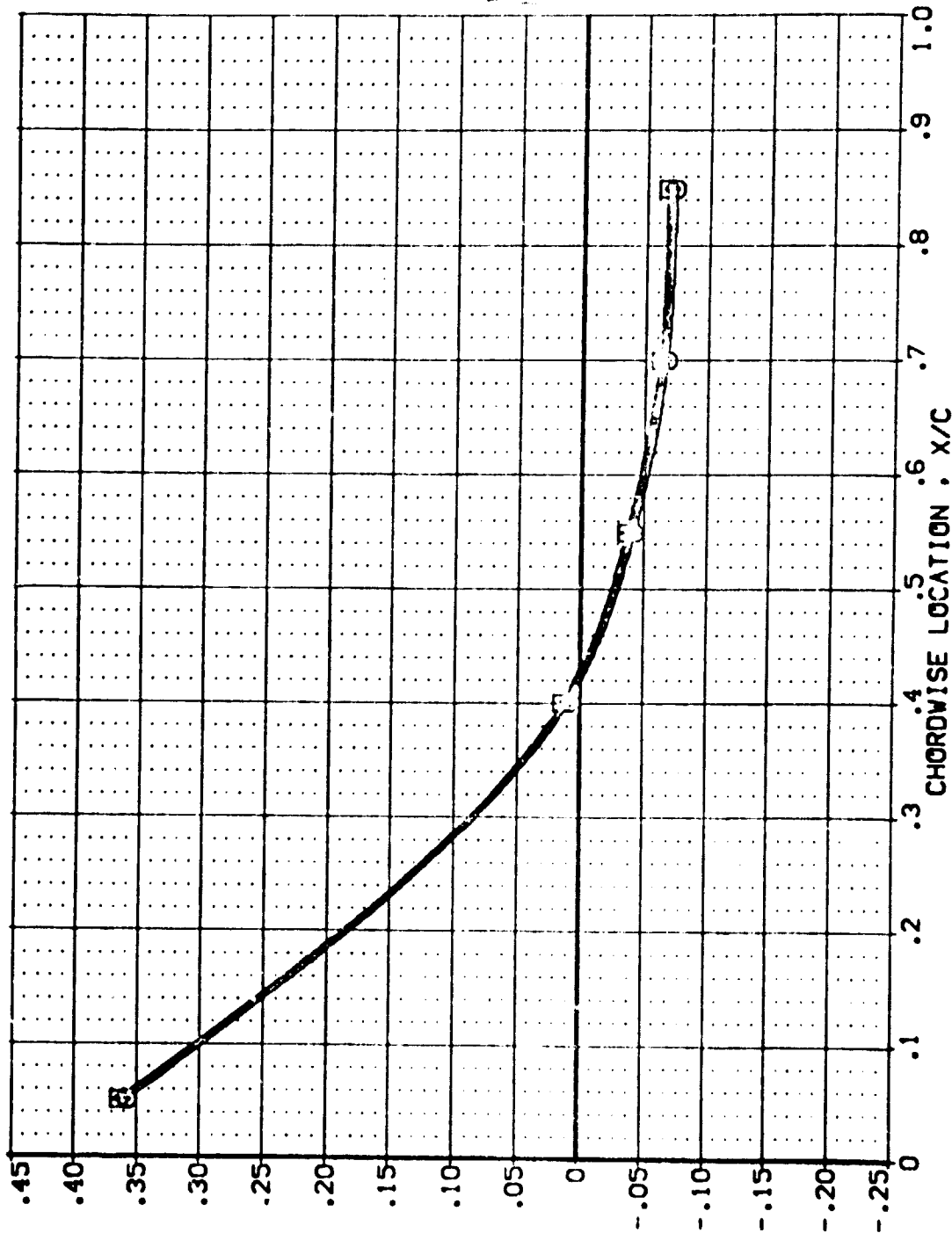
(UBZD46)
(UBZD50)
(UBZD51)
(UBZD54)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 TI SI
IA12C 03 TI SI
IA12C 04 TI SI
IA12C 04 TI SI

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER DFR SDFR GIMBAL
.000 23.660 .826 1.000
1.000 23.660 .826 1.000
2.000 23.660 .826 1.000
1.000 23.660 .826 1.000

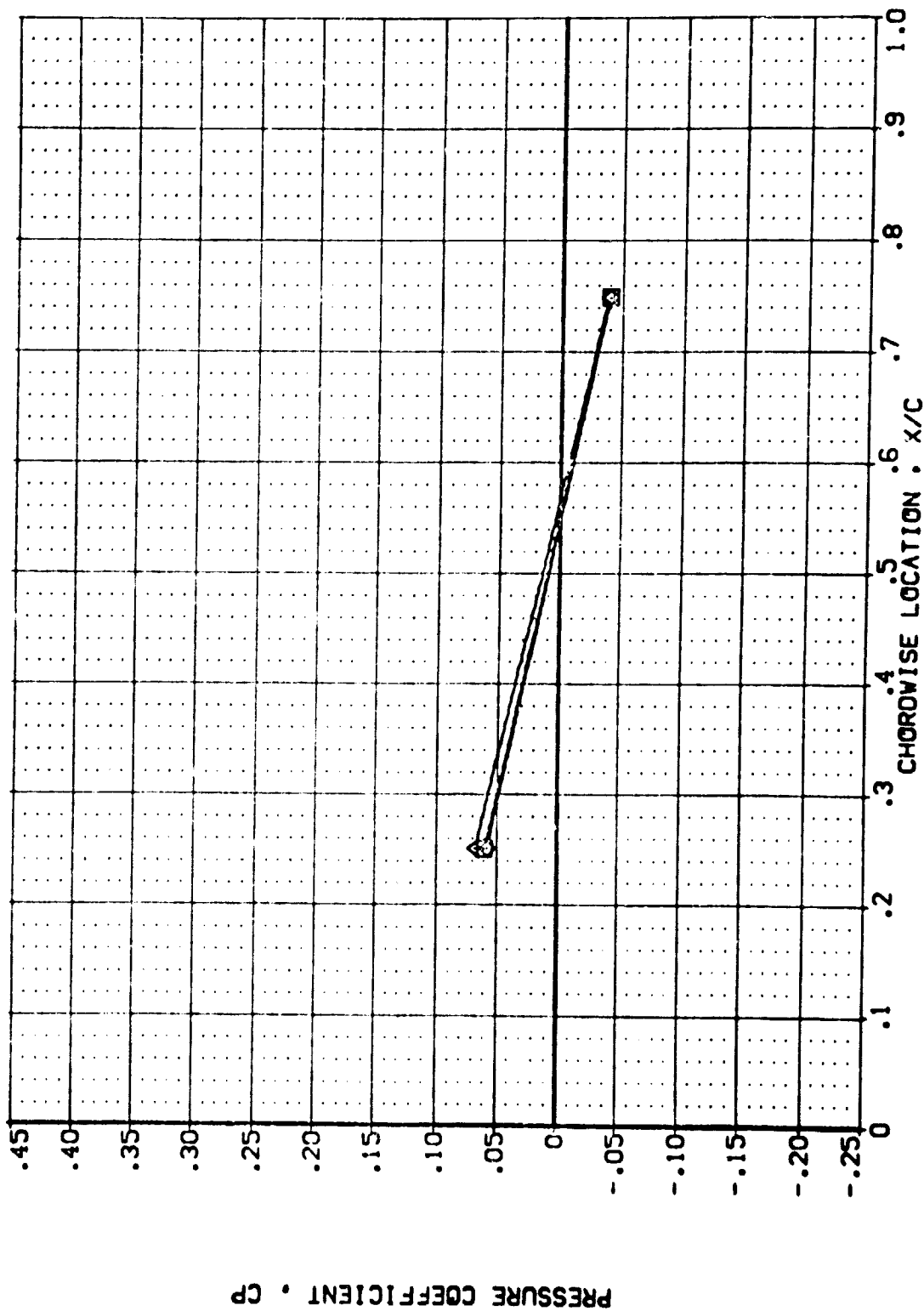


ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZ046) ASES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (UBZ000) ASES 87-710 1A12C 03 T1 S1 UPPER WING PRESSURE
 (UBZ081) ASES 87-710 1A12C 03 T1 S1 UPPER WING PRESSURE
 (UBZ084) ASES 87-710 1A12C 04 T1 S1 UPPER WING PRESSURE

POWER CDR SRRR GIBAL
 .000 23.860 1.000
 1.000 23.860 .826
 2.000 23.860 .826
 1.000 23.860 .826



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2046)
(UB2048)
(UB2050)
(UB2052)

AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

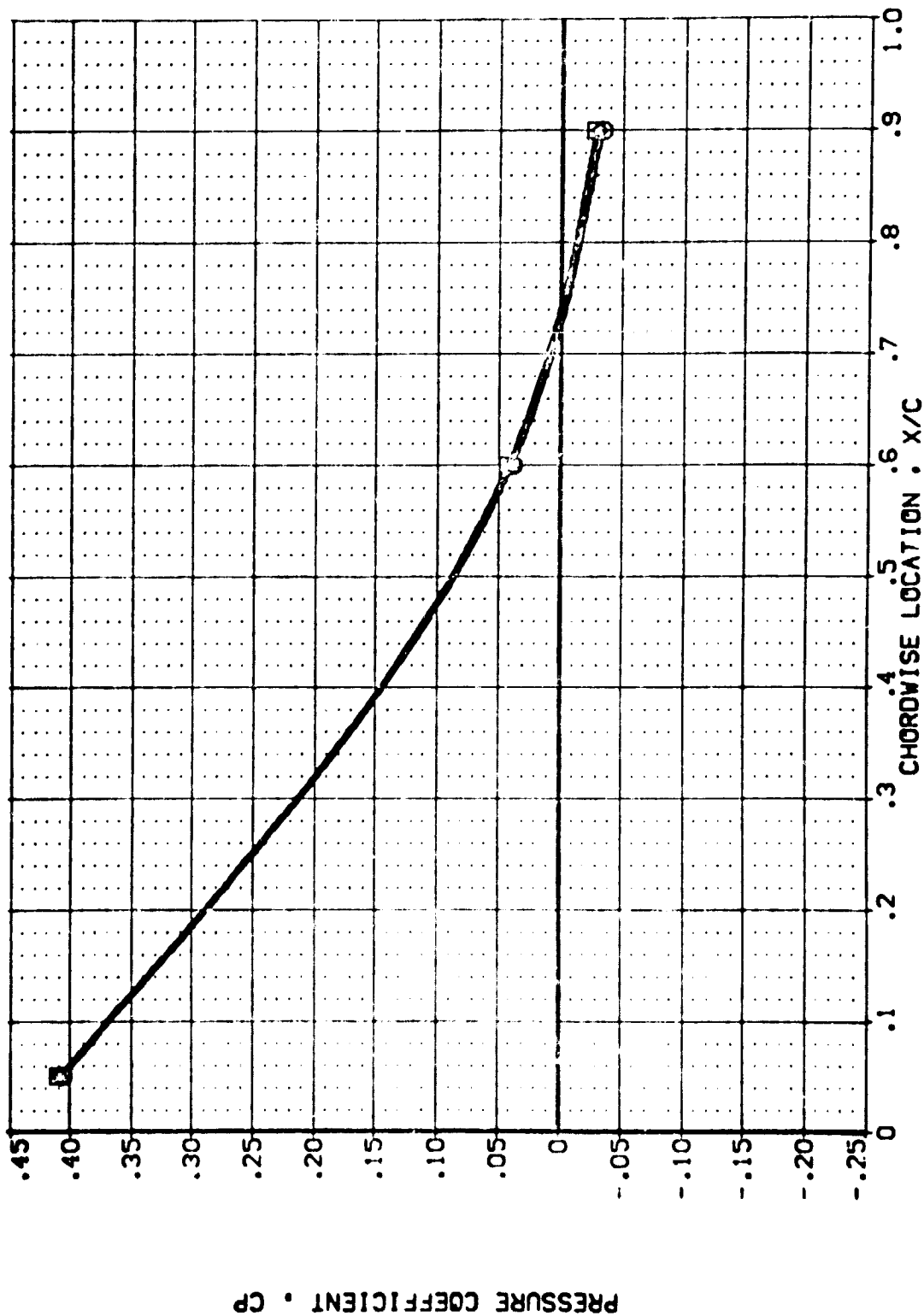
IA12C 01 TI SI
IA12C 03 TI SI
IA12C 03 TI SI
IA12C 04 TI SI

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER C/P
.000
1.000
2.000
1.000

SPWR
.826
.826
.826
.826

Q1MBAL
1.000
1.000
1.000
1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

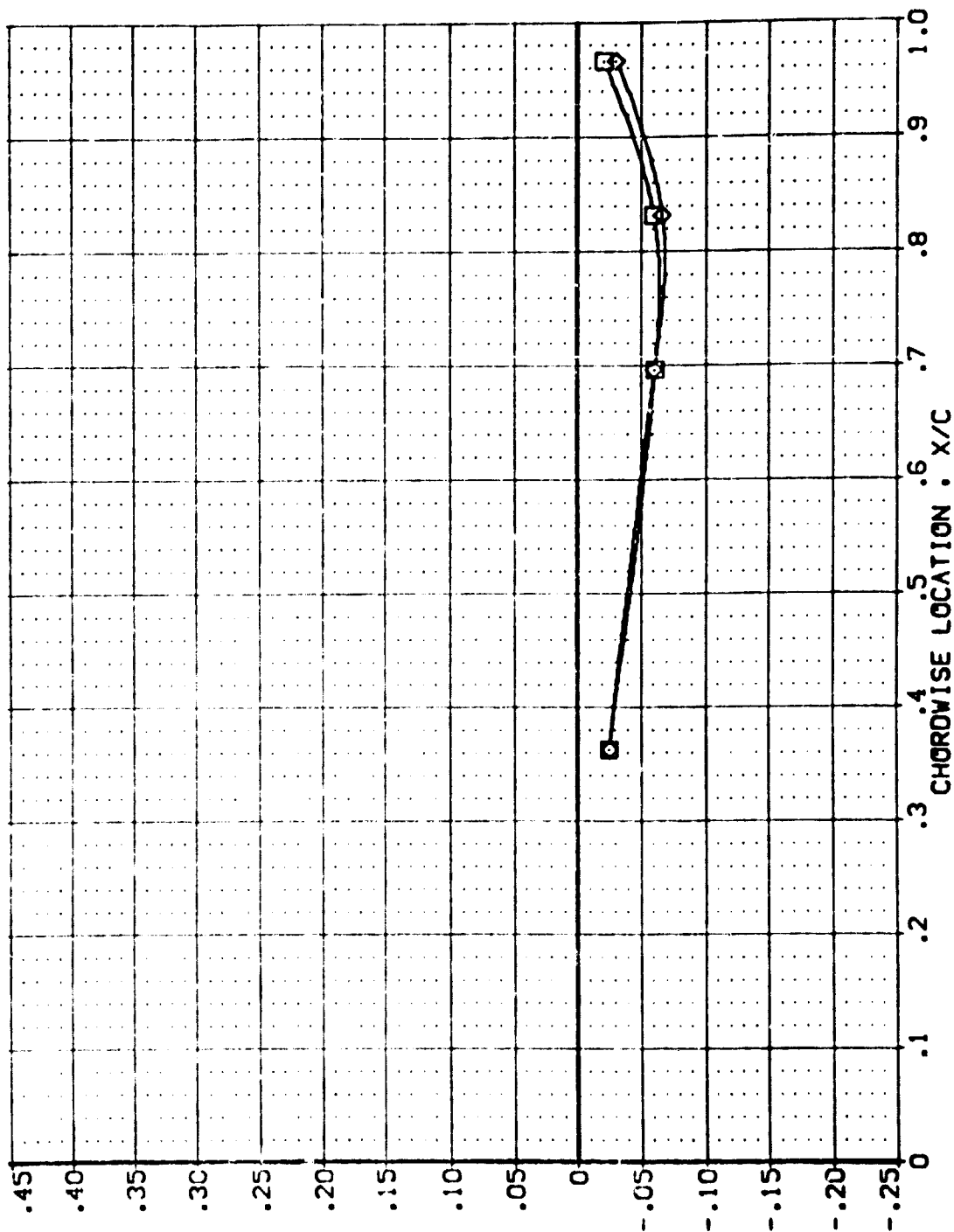
(LUB7046)
(LUB7090)
(LUB7091)
(LUB7094)

AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 04 T1 S1 UPPER WING PRESSURE

POWER 0.000 23.860 23.860
GPR 1.000 1.000 1.000
GPR 1.000 1.000 1.000

GINBAL 1.000 1.000 1.000

PRESSURE COEFFICIENT, CP

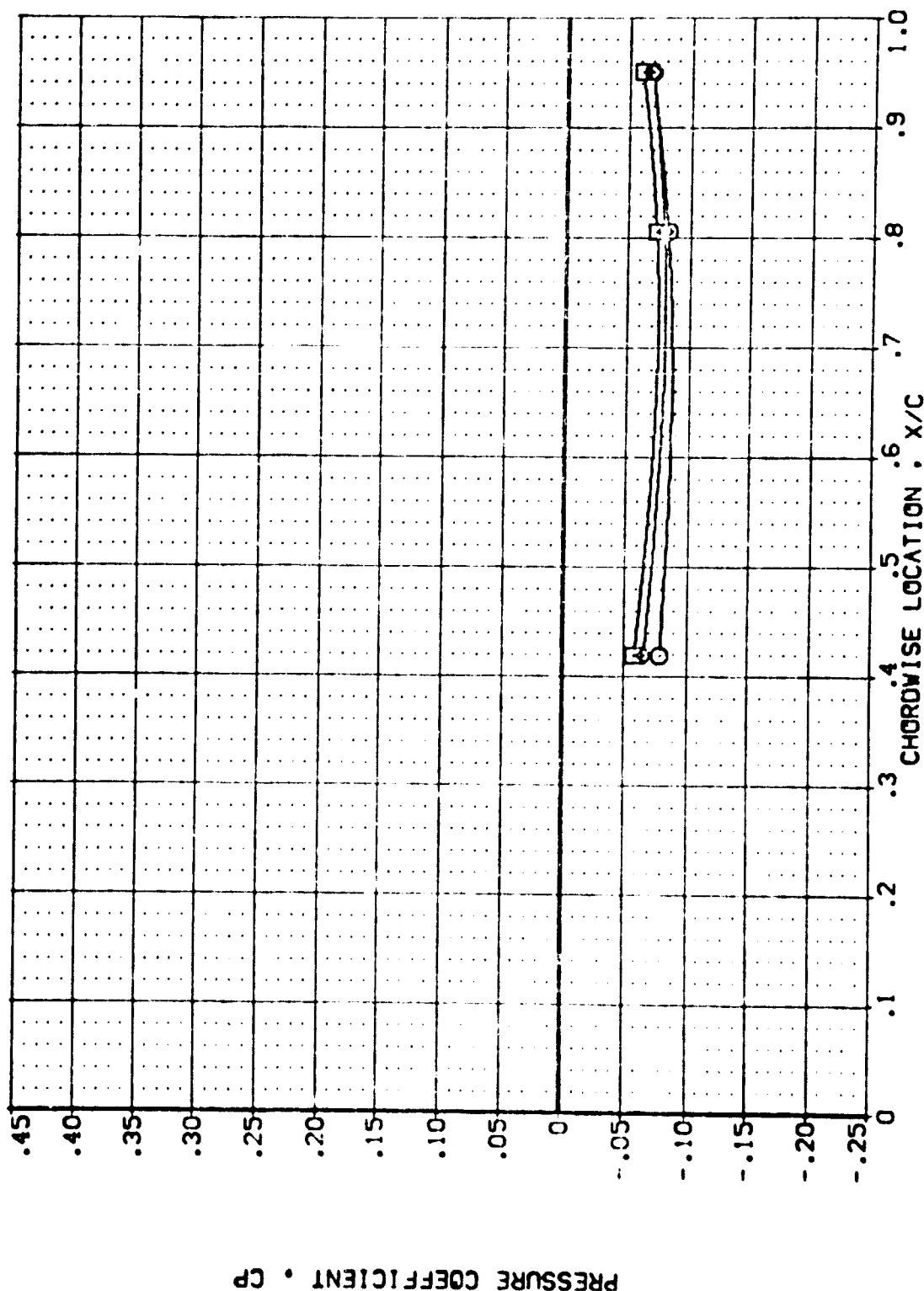


ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

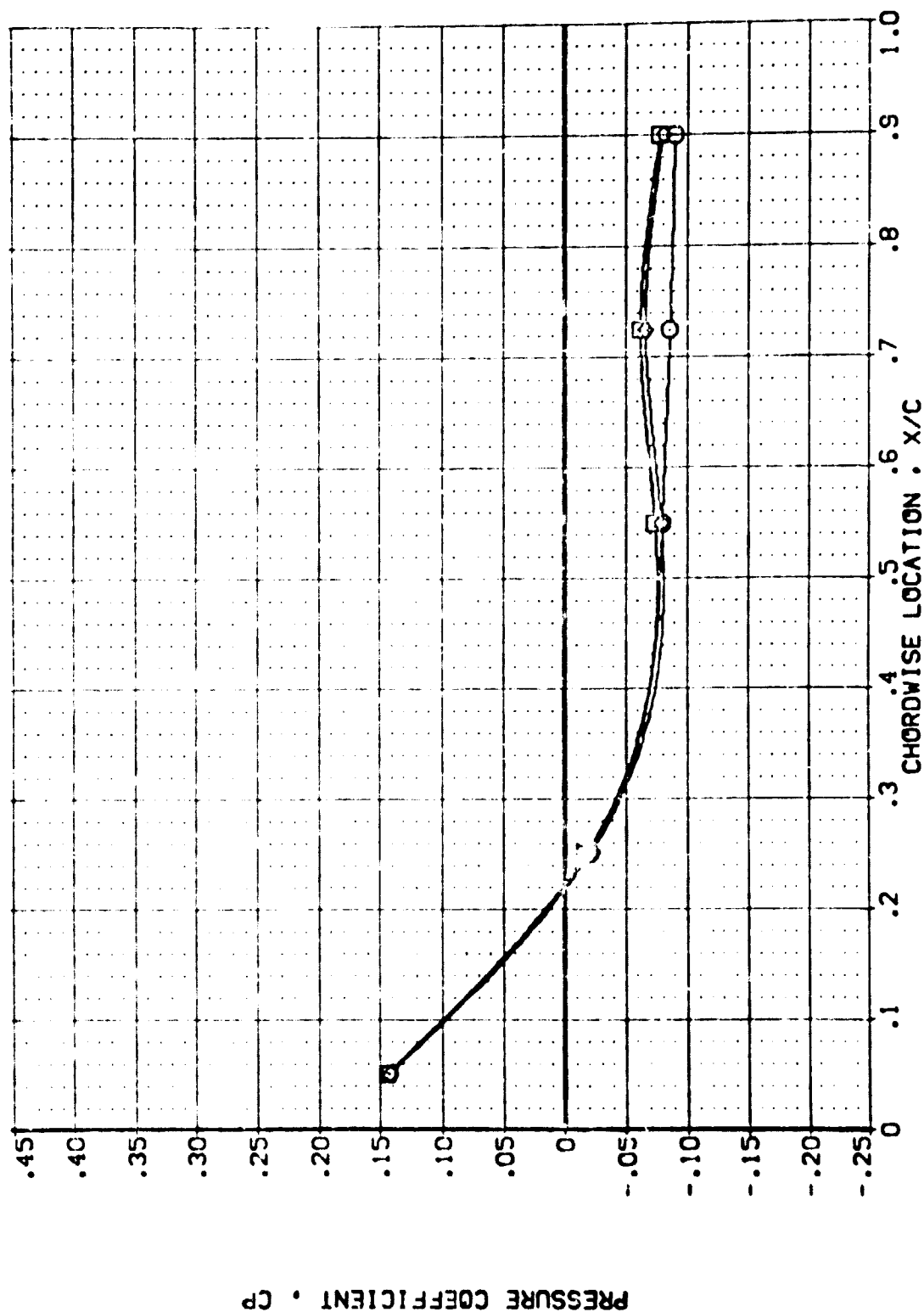
(UBZ046)	AVES 87-710	IA12C 01	TI	SI	UPPER WING	PRESSURE	POWER	OPR	SNR/R	GINBAL
(UBZ050)	AVES 87-710	IA12C 03	TI	SI	UPPER WING	PRESSURE	.000	23.860	.826	1.000
(UBZ031)	AVES 87-710	IA12C 03	TI	SI	UPPER WING	PRESSURE	1.000	23.860	.826	1.000
(UBZ034)	AVES 87-710	IA12C 04	TI	SI	UPPER WING	PRESSURE	2.000	23.860	.826	1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .427

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SPR	GIMBAL
(UB2046)	AVES 87-710 A12C 01 T1 S1	.000	23.860	.826	1.000
(UB1000)	AVES 87-710 A12C 03 T1 S1	1.000	23.860	.826	1.000
(UB1081)	AVES 87-710 A12C 03 T1 S1	2.000	23.860	.826	1.000
(UB2084)	AVES 87-710 A12C 04 T1 S1	1.000	23.860	.826	1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ046) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

(UBZ080) AYES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE

(UBZ081) AYES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE

(UBZ084) AYES 87-710 IAI2C 04 T1 S1 UPPER WING PRESSURE

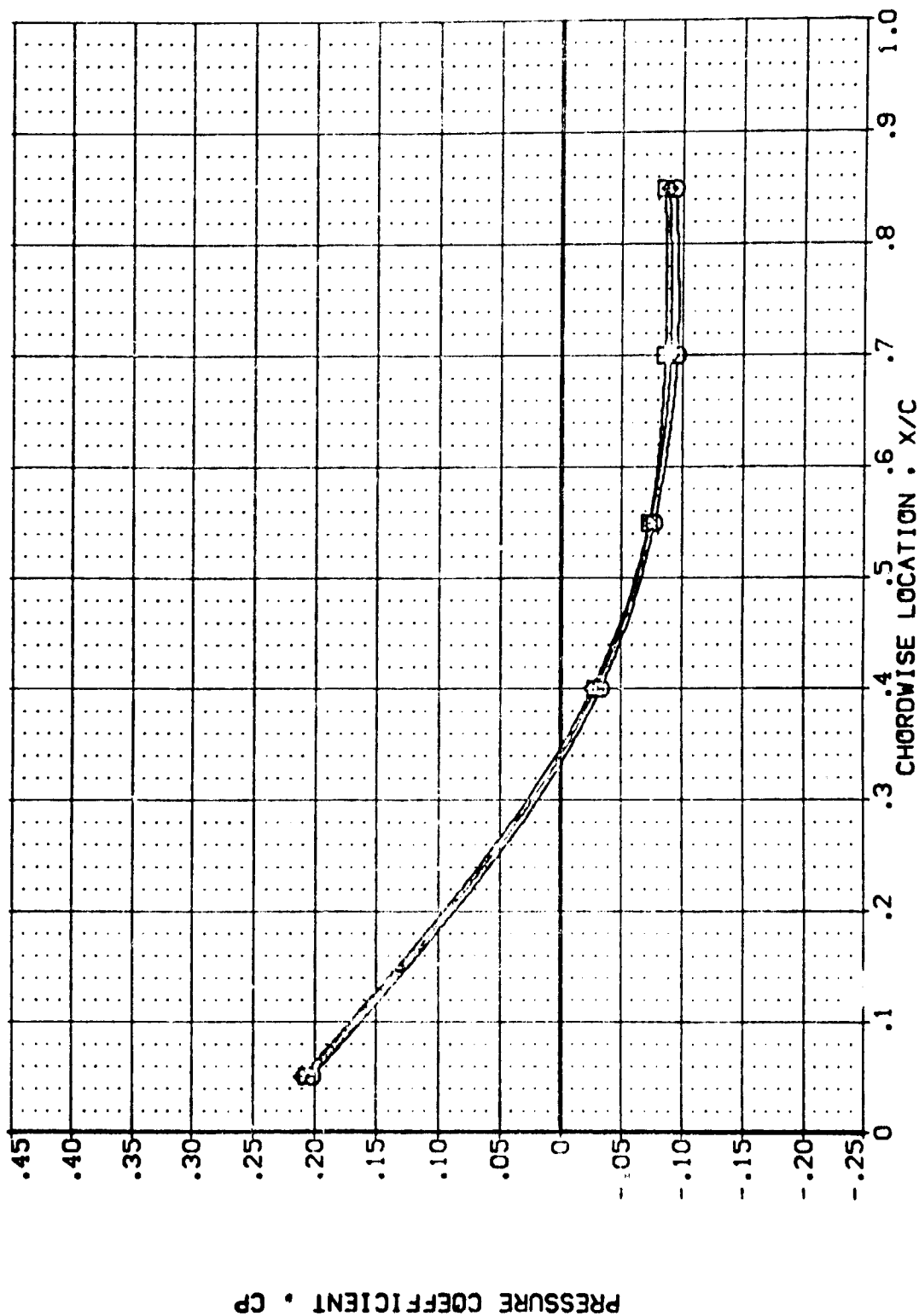
POWER CDR SR-PR GIMBAL

.000 23.860 .826 1.000

1.000 23.860 .826 1.000

2.000 23.860 .826 1.000

1.000 23.860 .826 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .673

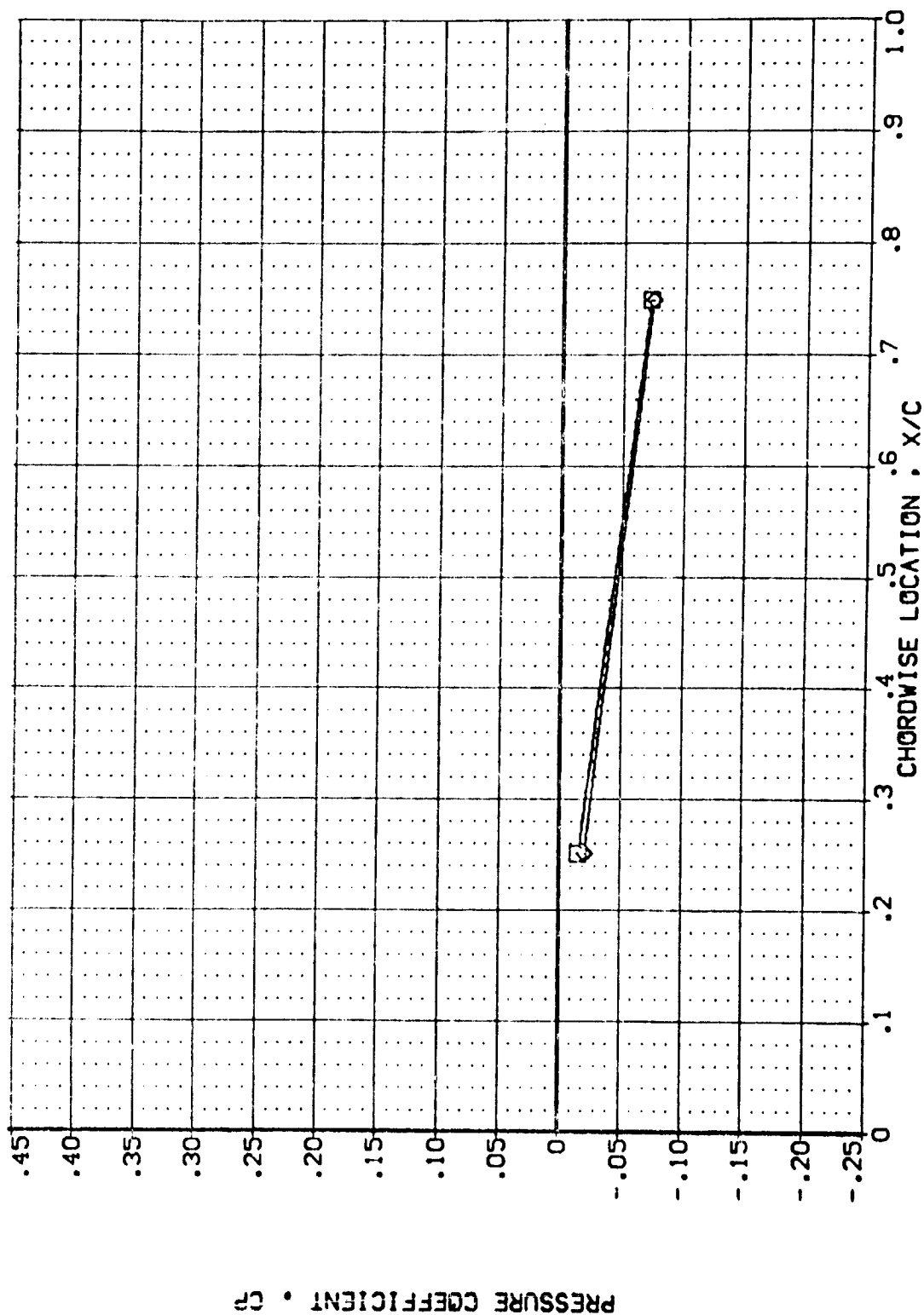
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER DPR SPRPR GIMBAL

(USZD46) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 23.860 .826 1.000

(USZD46) AYES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE 1.000 23.860 .826 1.000

(USZD46) AYES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE 2.000 23.860 .826 1.000

(USZD46) AYES 87-710 IAI2C 04 T1 S1 UPPER WING PRESSURE 1.000 23.860 .826 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .780

DATA SET SYMBOL

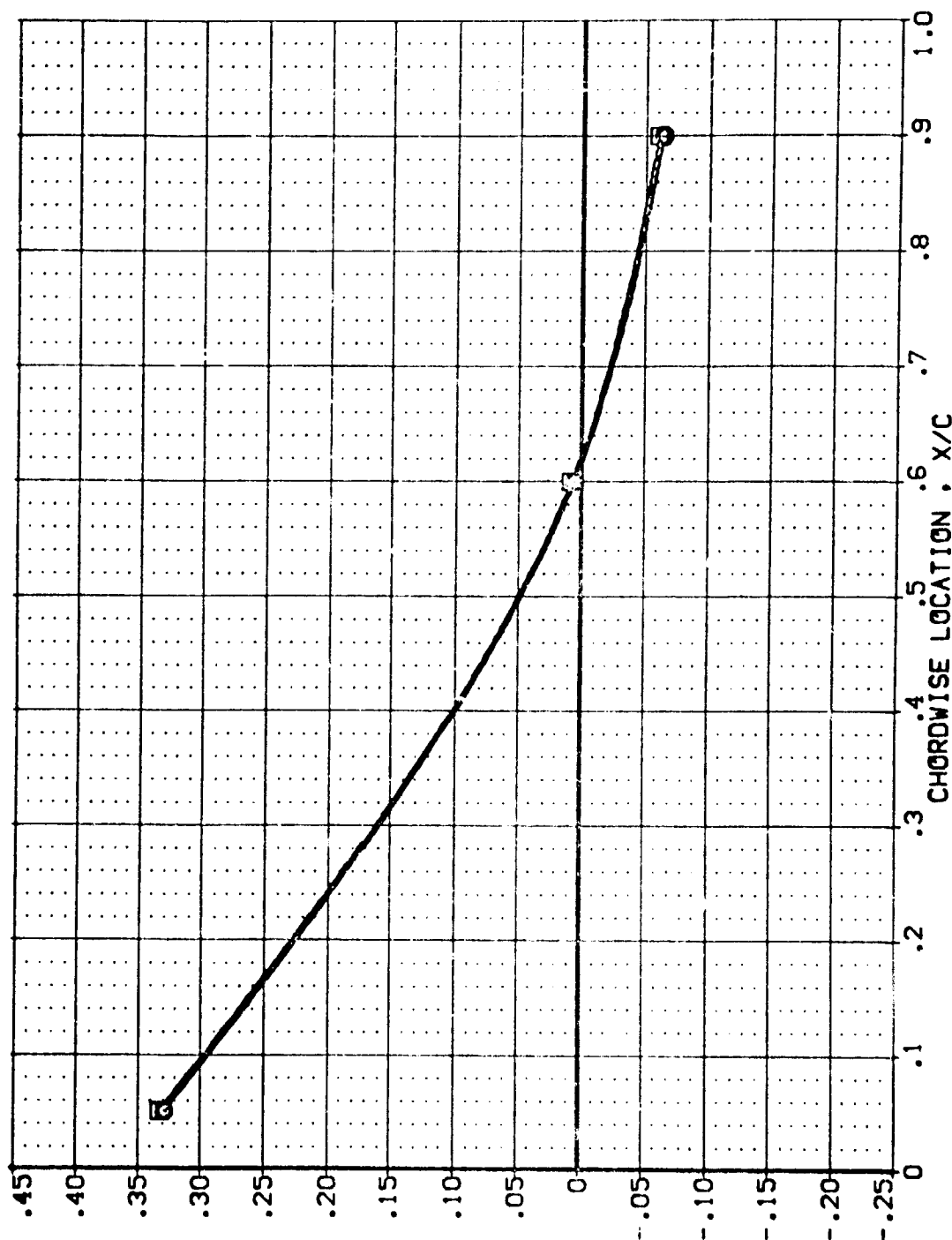
(LBZ046)
(LBZ000)
(LBZ031)
(LBZ084)

CONFIGURATION DESCRIPTION

AMES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IALZC 03 T1 S1 UPPER WING PRESSURE
AMES 87-710 IALZC 03 T1 S1 UPPER WING PRESSURE
AMES 87-710 IALZC 04 T1 S1 UPPER WING PRESSURE

POWER DFR SFRPR GIMBAL
.000 23.860 .826 1.000
1.000 23.860 .826 1.000
2.000 23.860 .826 1.000

PRESSURE COEFFICIENT, CP



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .887

DATA SET SYMBOL

(UR7046)
(UR7060)
(UR7081)
(UR7084)

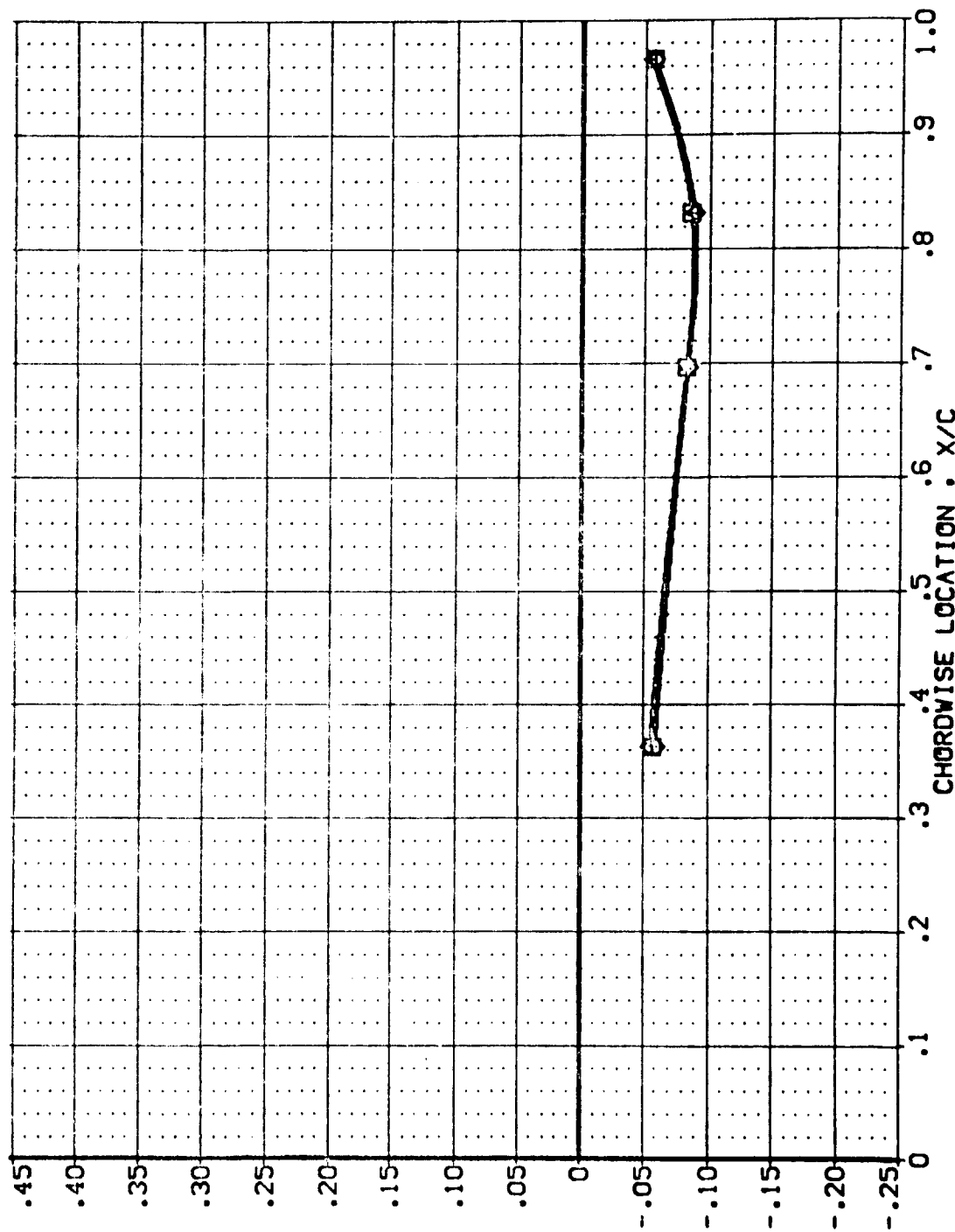
CONFIGURATION DESCRIPTION

AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 04 T1 S1 UPPER WING PRESSURE

POWER GPR SR-PR GIMBAL

.000
1.000
2.000
1.000
.826
.826
23.860
23.860

PRESSURE COEFFICIENT, CP



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .299

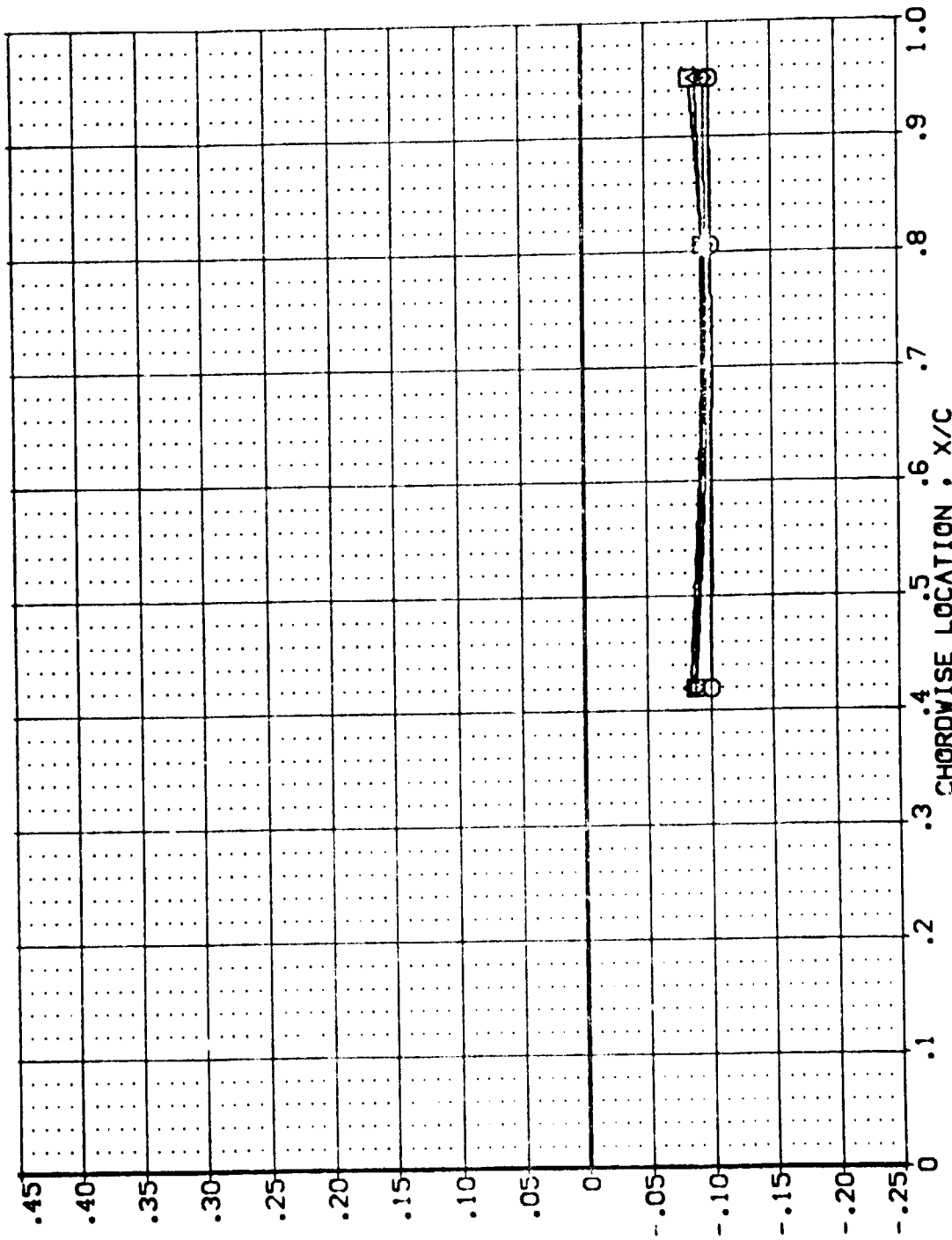
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ046)
(UBZ030)
(UBZ081)
(UBZ084)

AVES 87-710 [A]ZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 [A]ZC 03 T1 S1 UPPER WING PRESSURE
AVES 87-710 [A]ZC 04 T1 S1 UPPER WING PRESSURE

POWER GPR SRRR GIMBAL
1.000 23.860 .826 1.000
2.000 23.860 .826 1.000
1.000 23.860 .826 1.000

PRESSURE COEFFICIENT, CP



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

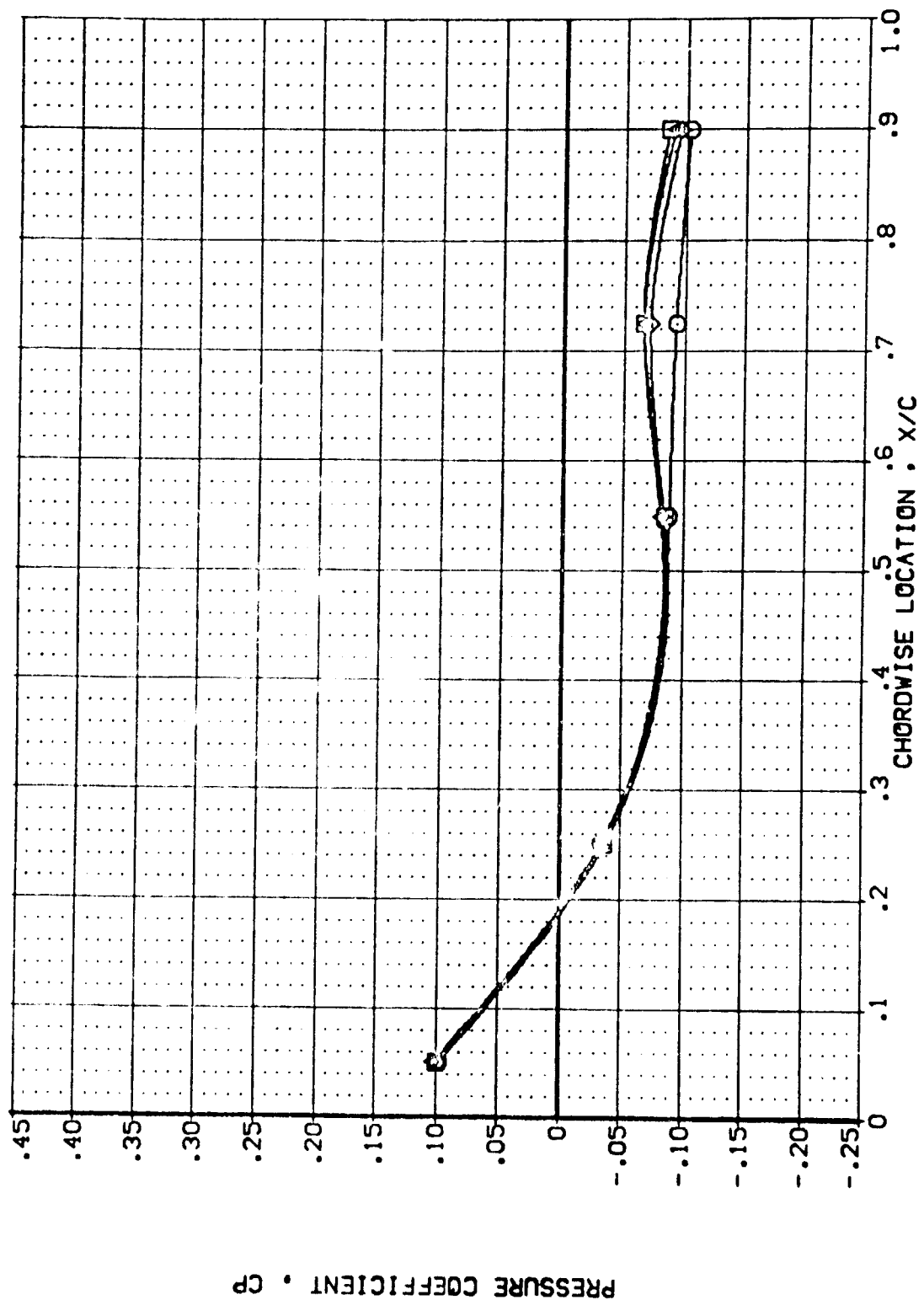
MACH = 3.500 ALPHA = 8.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

{UBZ046}	AVES 87-710	IA12C 01	T1	SI	UPPER WING PRESSURE
{UBZ000}	AVES 87-710	IA12C 03	T1	SI	UPPER WING PRESSURE
{UBZ081}	AVES 87-710	IA12C 03	T1	SI	UPPER WING PRESSURE
{UBZ084}	AVES 87-710	IA12C 04	T1	SI	UPPER WING PRESSURE

POWER GPR SFRFR GIMBAL

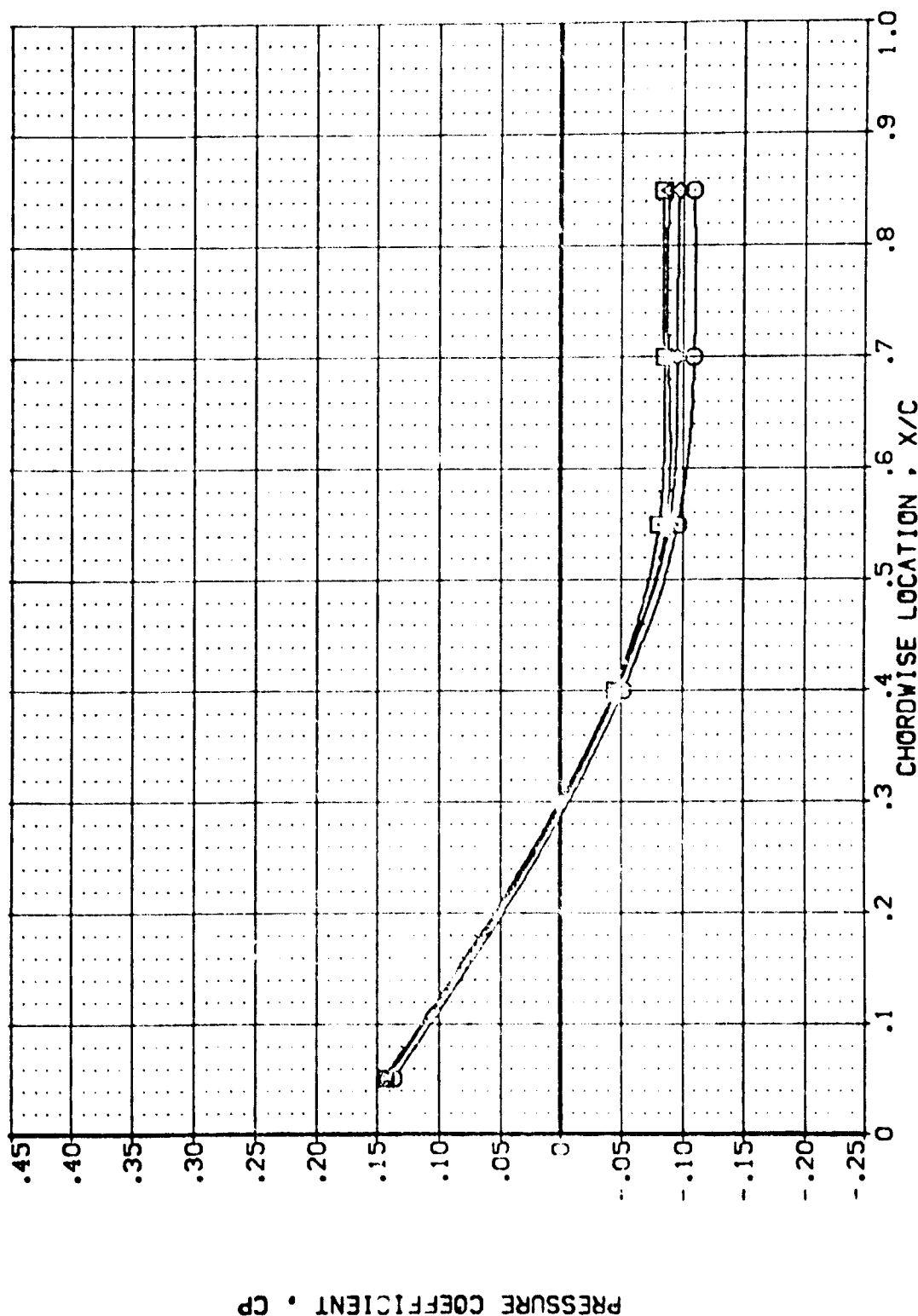
1.000	23.860	.826	1.000
1.000	23.860	.826	1.000
2.000	23.860	.826	1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	DPR	SRPR	GIMBAL
(UB2046)	AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	.000	23.660	.826	1.000
(UB2080)	AMES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE	1.000	23.660	.826	1.000
(UB2081)	AMES 87-710 IAI2C 03 T1 S1 UPPER WING PRESSURE	2.000	23.660	.826	1.000
(UB2084)	AMES 87-710 IAI2C 04 T1 S1 UPPER WING PRESSURE	1.000	23.660	.826	1.000

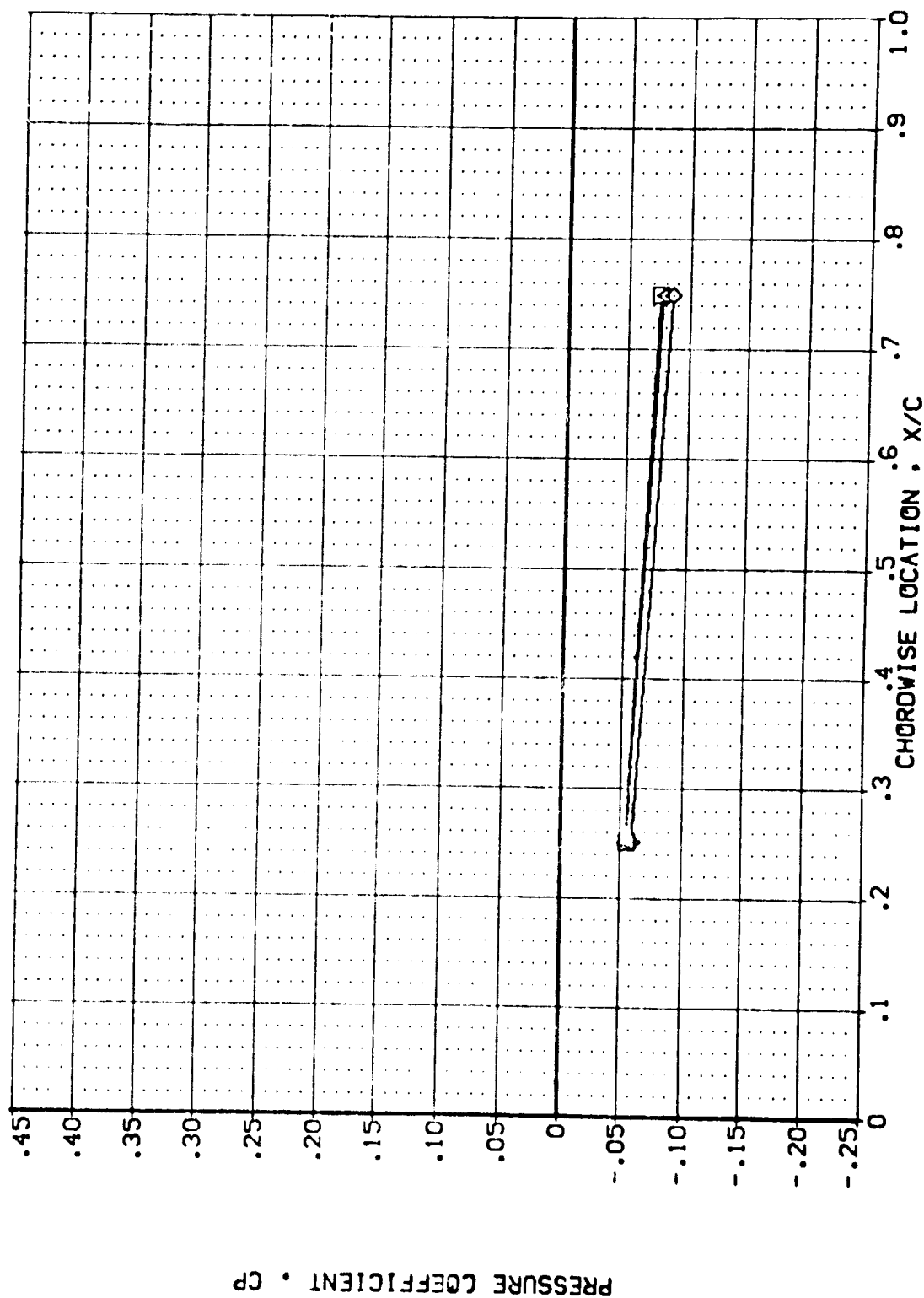


ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SNRPR	GINBAL
UBZD046	AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE	.000			1.000
UBZD047	AVES 87-710 1A12C 03 T1 S1 UPPER WING PRESSURE	1.000	23.860	.826	1.000
UBZD048	AVES 87-710 1A12C 03 T1 S1 UPPER WING PRESSURE	2.000		.826	1.000
UBZD049	AVES 87-710 1A12C 04 T1 S1 UPPER WING PRESSURE	1.000	23.860	.826	1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ046)
(UBZ000)
(UBZ081)
(UBZ084)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

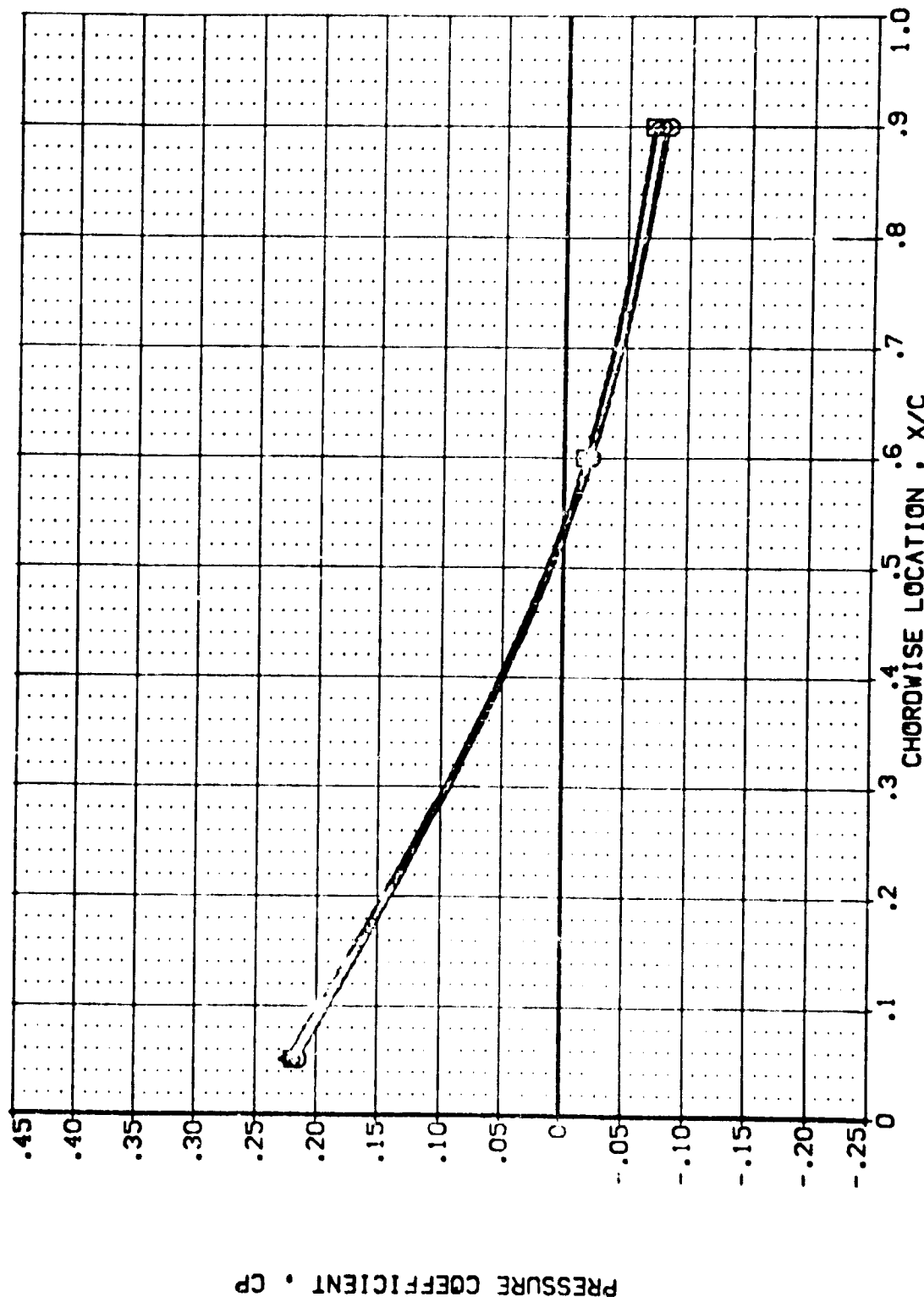
1A12C 01 T1 S1
1A12C 03 T1 S1
1A12C 03 T1 S1
1A12C 04 T1 S1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER 0.000
POWER 1.000
POWER 2.000
POWER 1.000

SR-PR 0.826
SR-PR 0.826
SR-PR 0.826
SR-PR 0.826

GIMBAL 1.000
GIMBAL 1.000
GIMBAL 1.000
GIMBAL 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

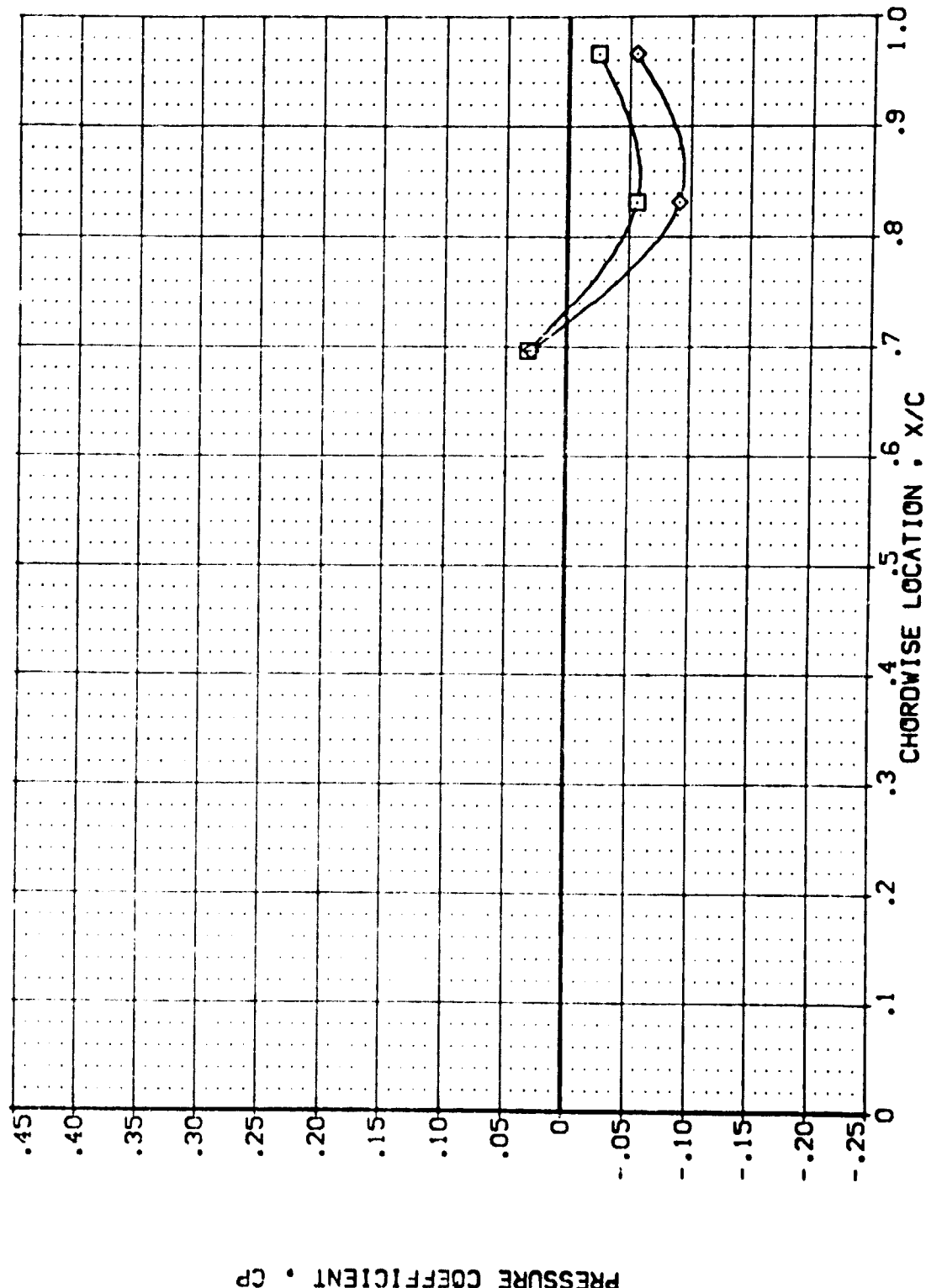
MACH = 3.500 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ037)
(LBZ078)
(LBZ082)

AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 03 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 04 T1 S1 LOWER WING PRESSURE

POWER C/P R S/P R GIMBAL
.000
1.000 31.260 .916 1.000
1.000 31.260 .916 1.000



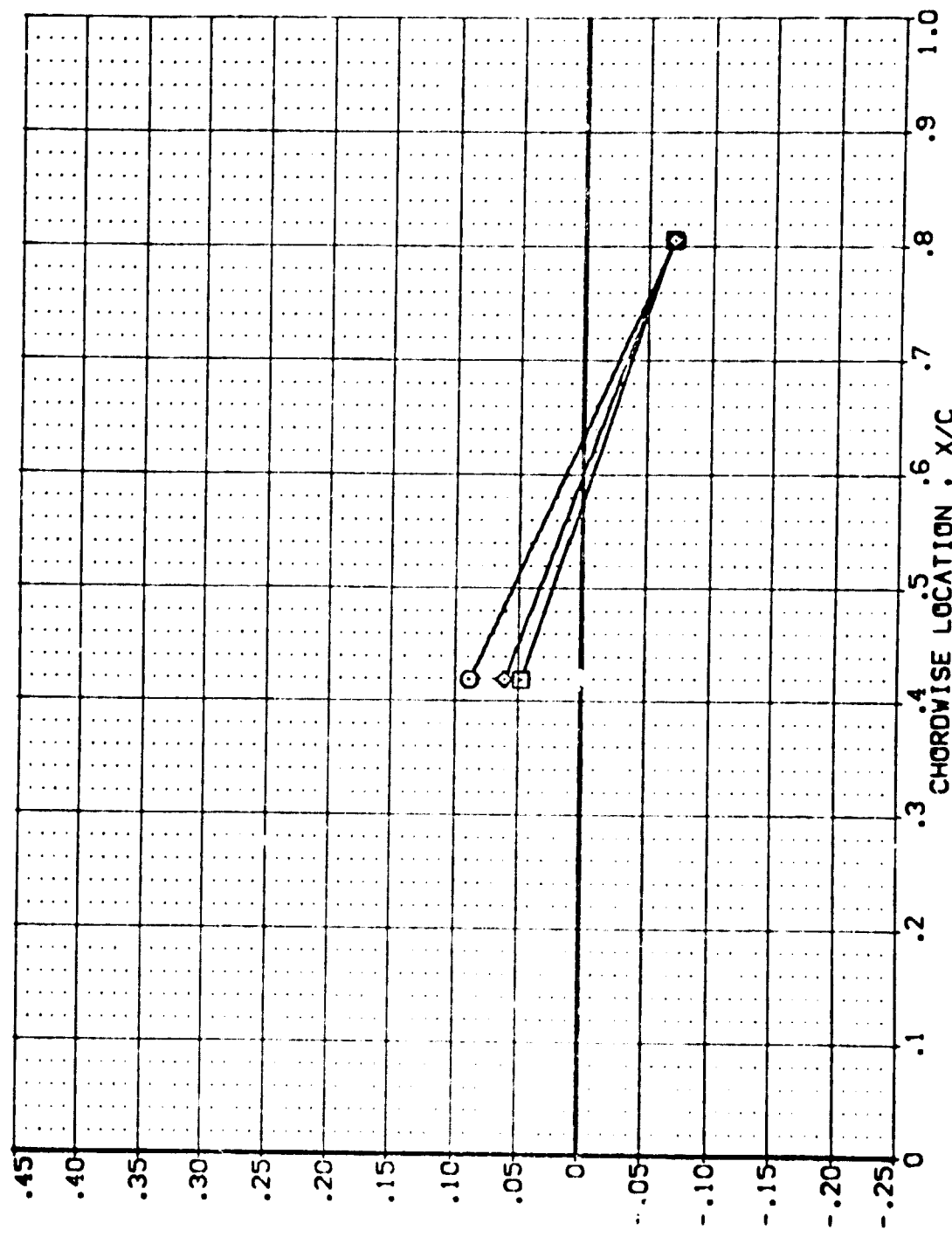
PRESSURE COEFFICIENT • CP

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LB2037) ARES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
 (LB2078) ARES 87-710 IAI2C 03 T1 S1 LOWER WING PRESSURE
 (LB2082) ARES 87-710 IAI2C 04 T1 S1 LOWER WING PRESSURE

POWER DFR SDFR GIMBAL
 .000 31.260 .916 1.000
 1.000 31.260 .916 1.000



PRESSURE COEFFICIENT • CP

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

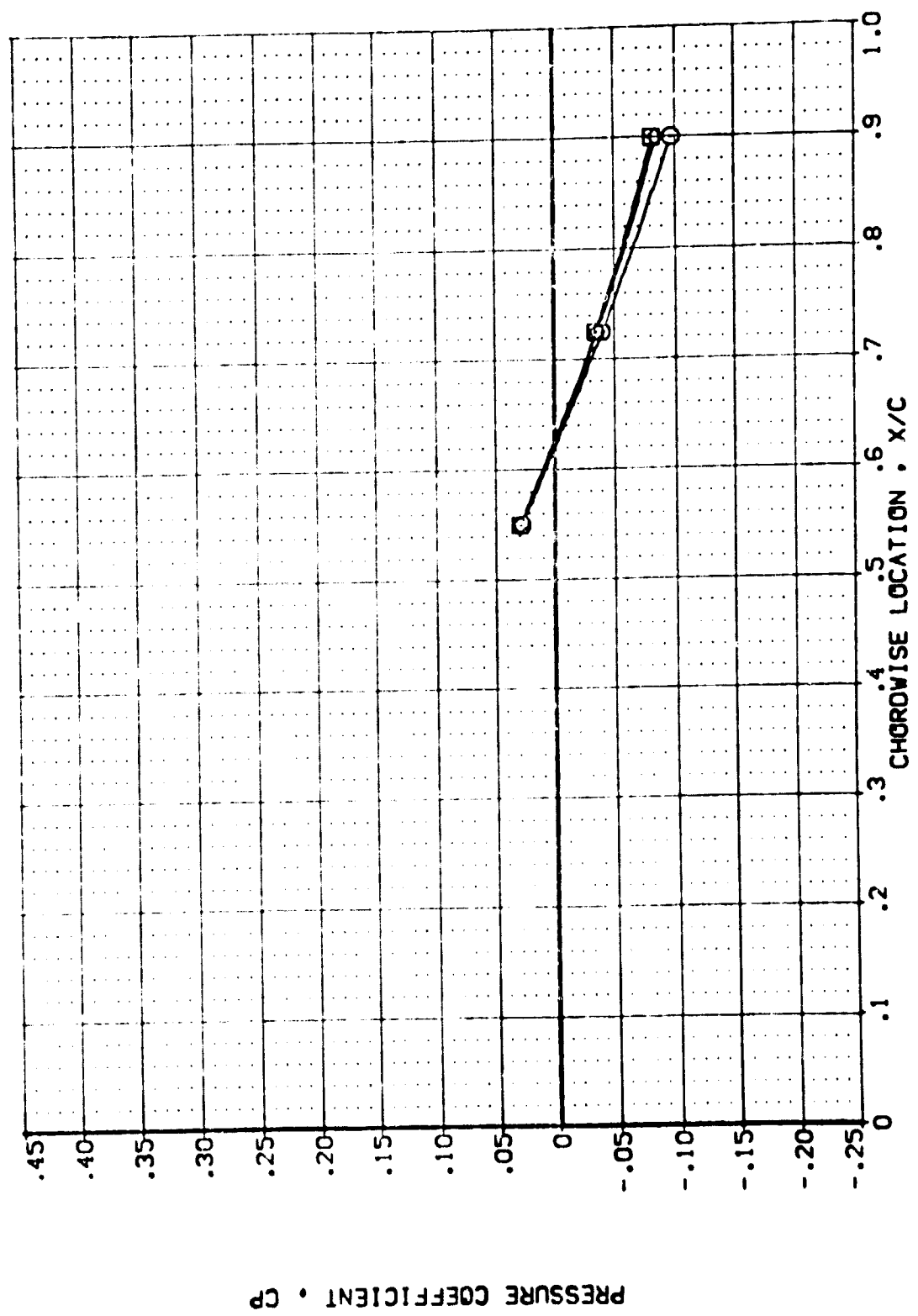
MACH = 2.500 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER OPR SRPR GIMBAL

(LB0007) AYES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE .000 31.280 .916 1.000

(LB0078) AYES 87-710 IAL2C 03 T1 S1 LOWER WING PRESSURE 1.000 31.260 .916 1.000

(LB0082) AYES 87-710 IAL2C 04 T1 S1 LOWER WING PRESSURE 1.000 31.260 .916 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .534 PAGE 129

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB2007)
(LB2078)
(LB2082)

AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 TI SI
IA12C 03 TI SI
IA12C 04 TI SI

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

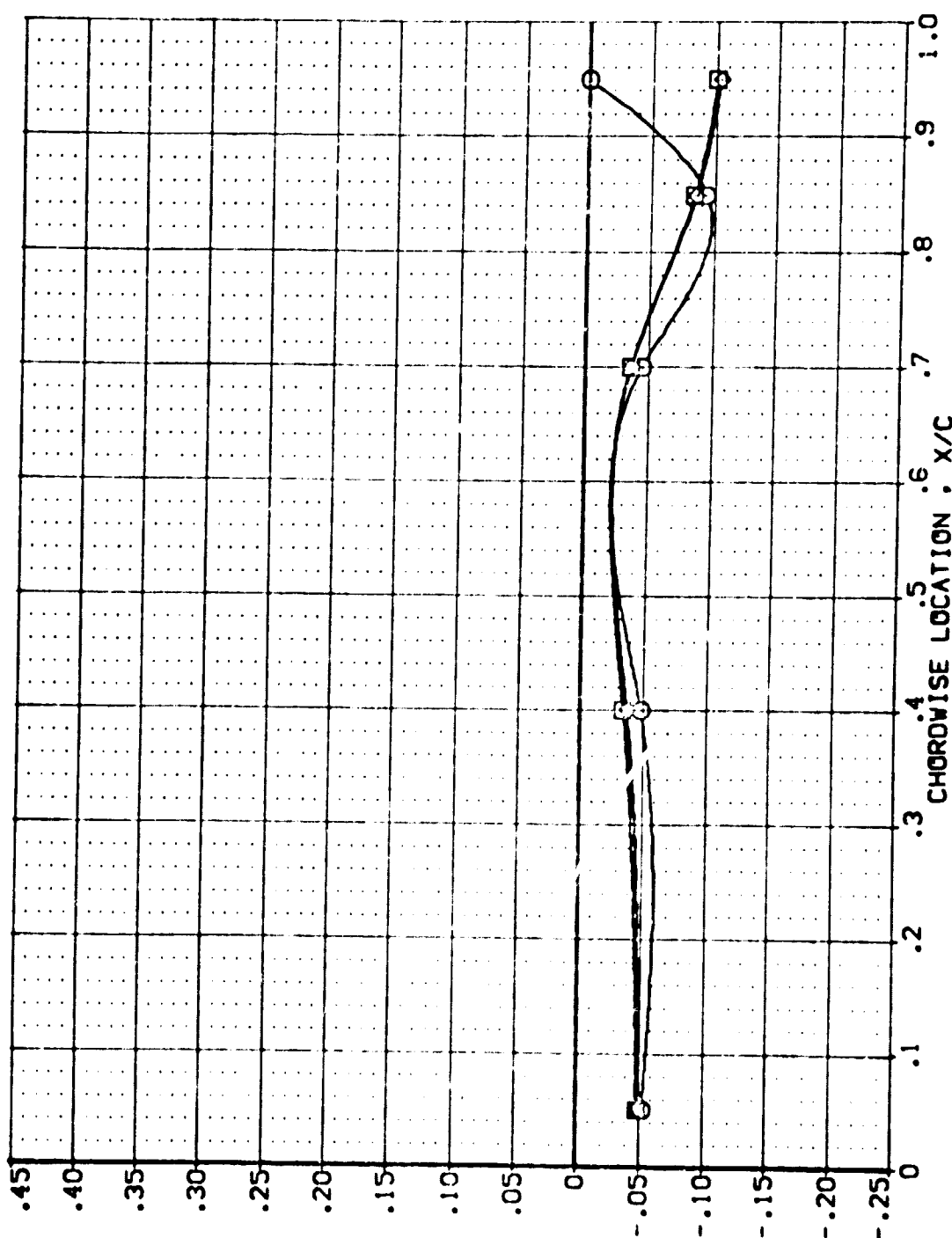
POWER
.000
1.000
1.000

CPR
31.260
31.260

SRPR
.916
.916

GIMBAL
1.000
1.000
1.000

PRESSURE COEFFICIENT, CP



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

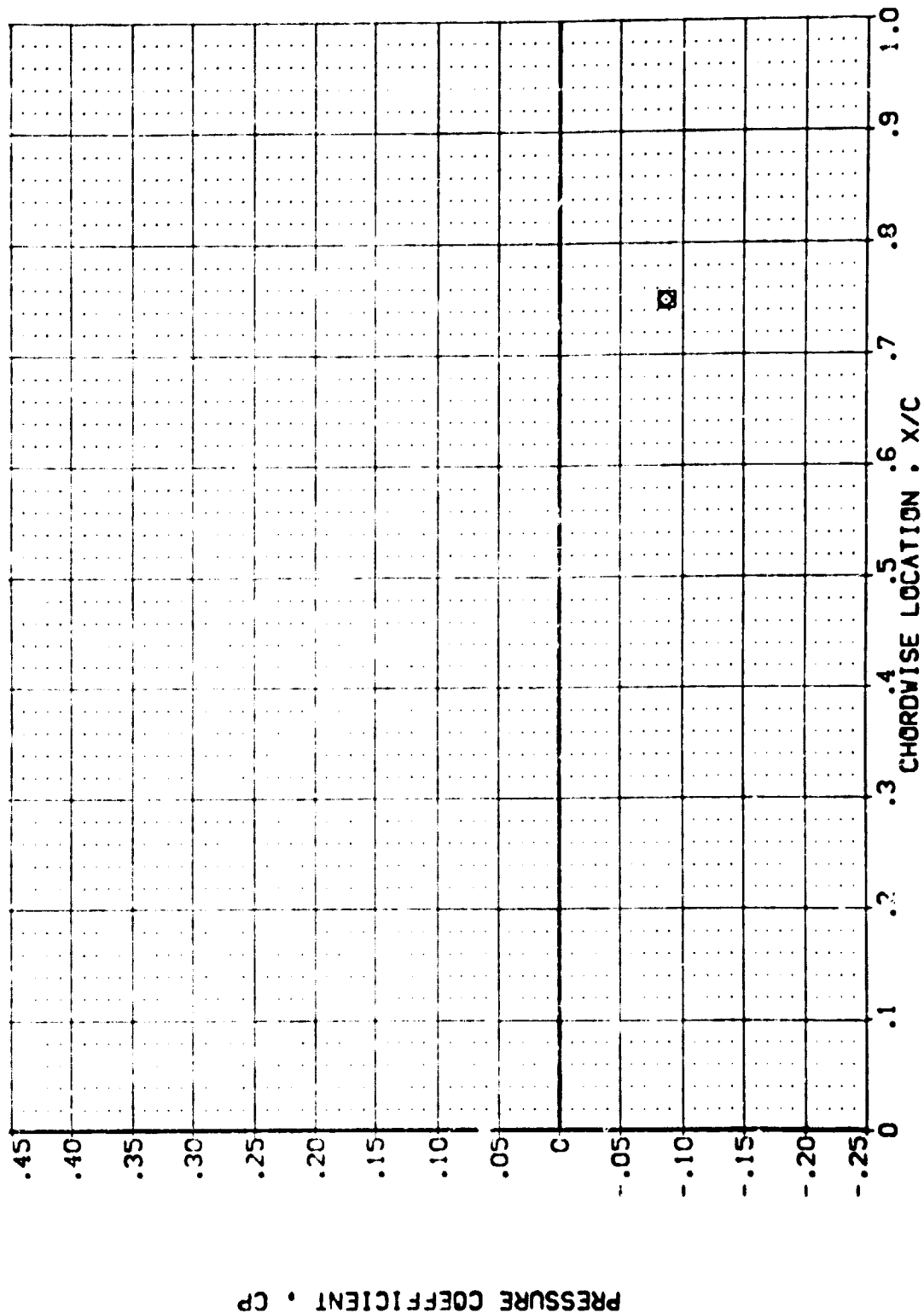
MACH = 2.500 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER DPR STPR GIMBAL

(LB/007) AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE .000 31.260 .916 1.000

(LB/008) AMES 87-710 1A12C 03 T1 S1 LOWER WING PRESSURE 1.000 31.260 .916 1.000

(LB/002) AMES 87-710 1A12C 04 T1 S1 LOWER WING PRESSURE 1.000 31.260 .916 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .780 PAGE 131

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ037)
(LBZ078)
(LBZ082)

AVES 87-710
AVES 87-710
AVES 87-710

1A12C 01 T1 S1
1A12C 03 T1 S1
1A12C 04 T1 S1

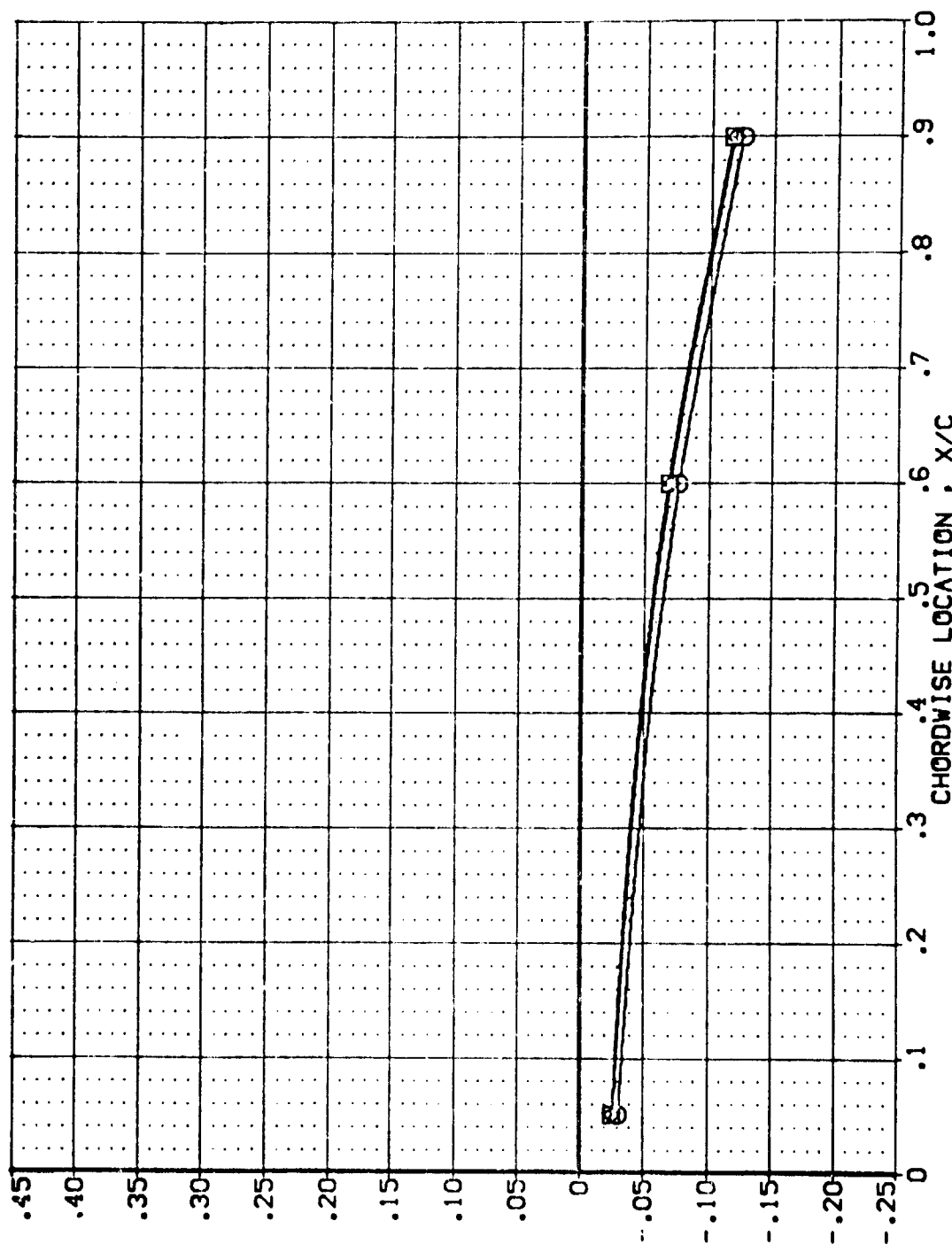
LOWER WING PRES. JFE
LOWER WING PRES. JFE
LOWER WING PRES. JFE

POWER 0.000
1.000
1.000

OPR 31.260
31.260

SWPR -916
-916

GIMBAL 1.000
1.000
1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .887

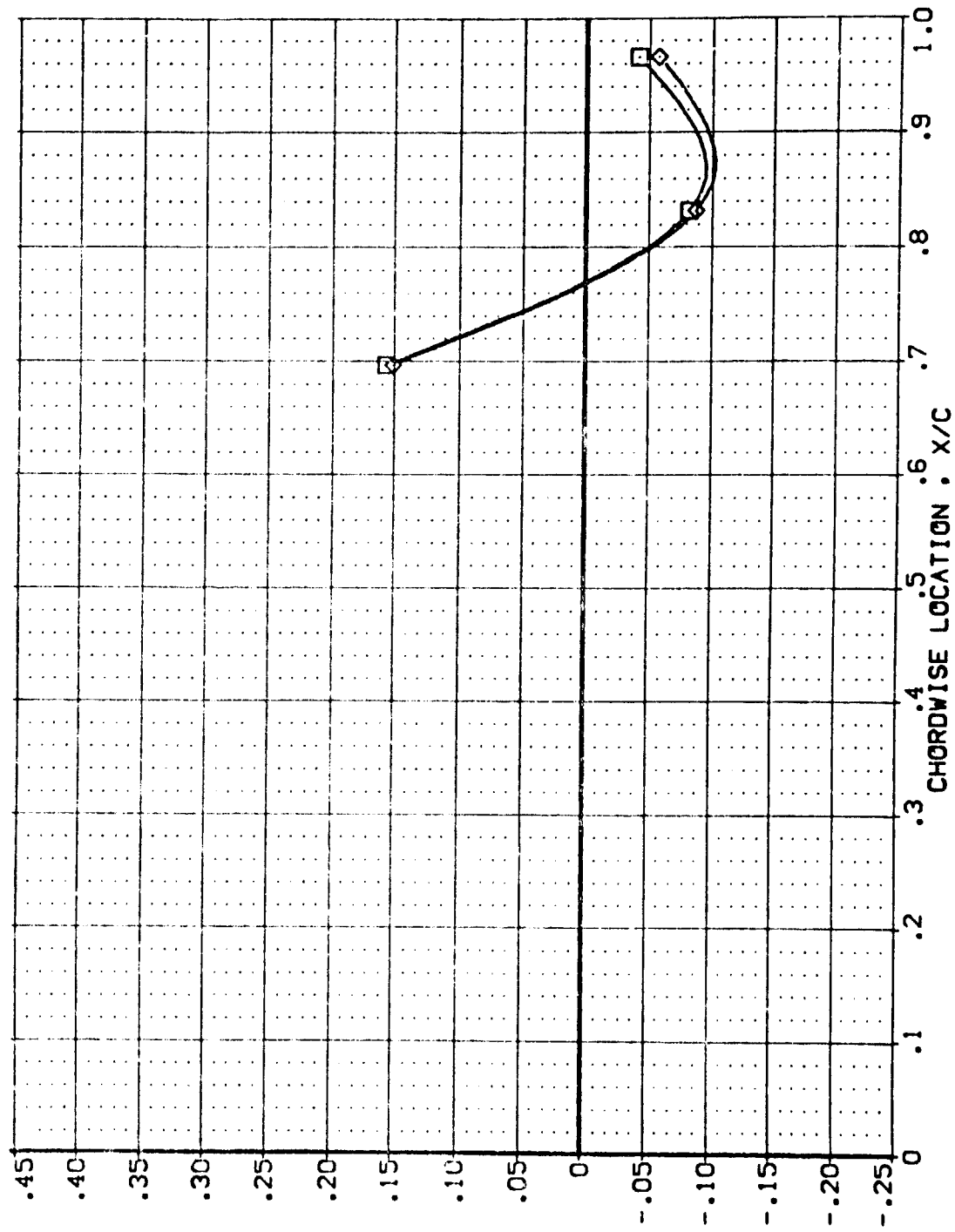
DATA SET SYMBOL

(LB2037)
(LB2078)
(LB2082)

CONFIGURATION DESCRIPTION
AHES 87-710 1A12C 01 11 S1 LOWER WING PRESSURE
AHES 87-710 1A12C 03 11 S1 LOWER WING PRESSURE
AHES 87-710 1A12C 04 11 S1 LOWER WING PRESSURE

POWER CDR SRRR GIMBAL
.000 31.260 1.000
1.000 31.260 .916 1.000

PRESSURE COEFFICIENT • CP



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .299

DATA SET SYMBOL: (LB2007)
 (LB2078)
 (LB2082)

CONFIGURATION DESCRIPTION:
 AYES 87-710 1A12C 01 T1 S1
 AYES 87-710 1A12C 03 T1 S1
 AYES 87-710 1A12C 04 T1 S1

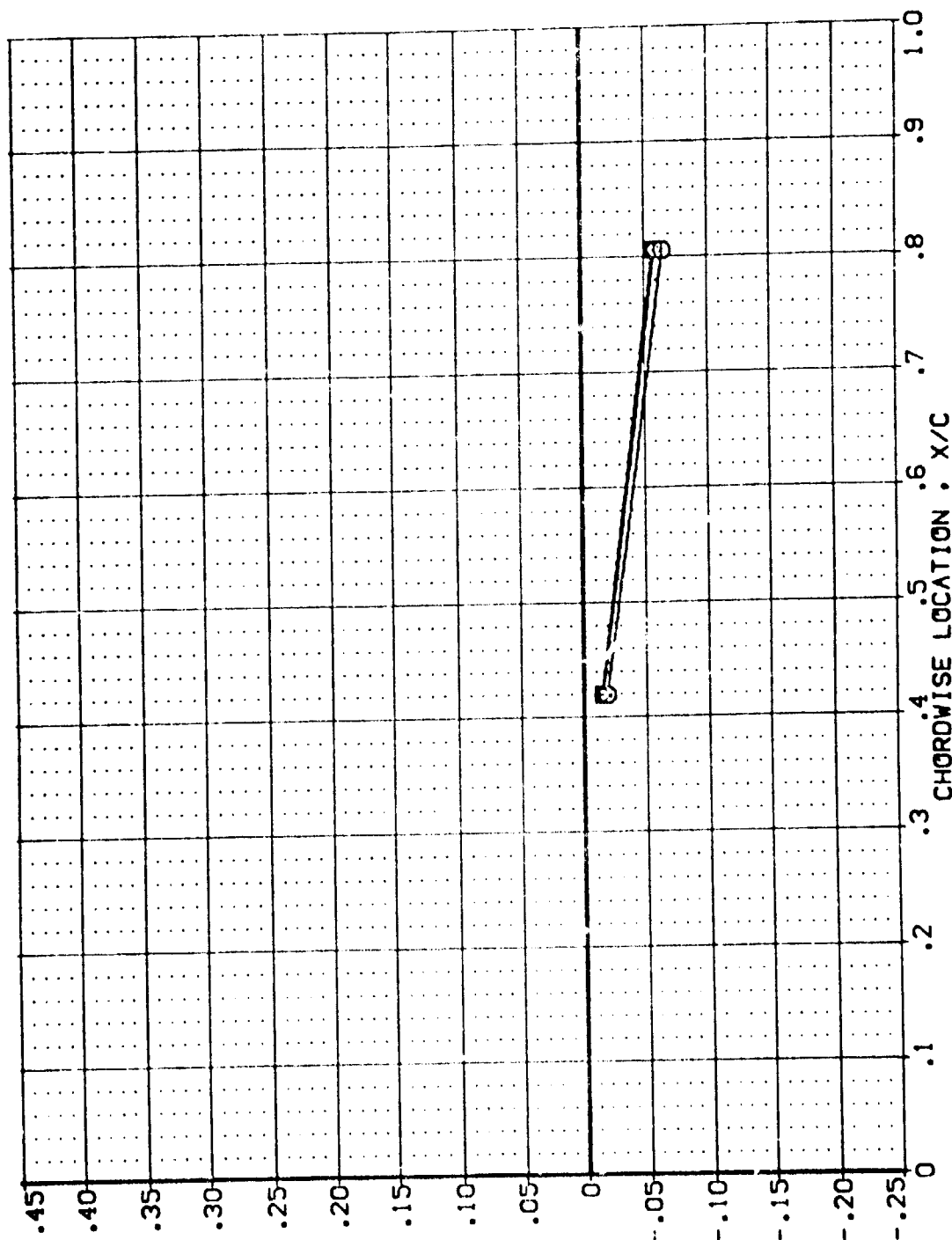
POWER: .000
 .000
 1.000

QPR: 31.260
 31.260
 31.260

SRPR: .916
 .916
 .916

GIMBAL: 1.000
 1.000
 1.000

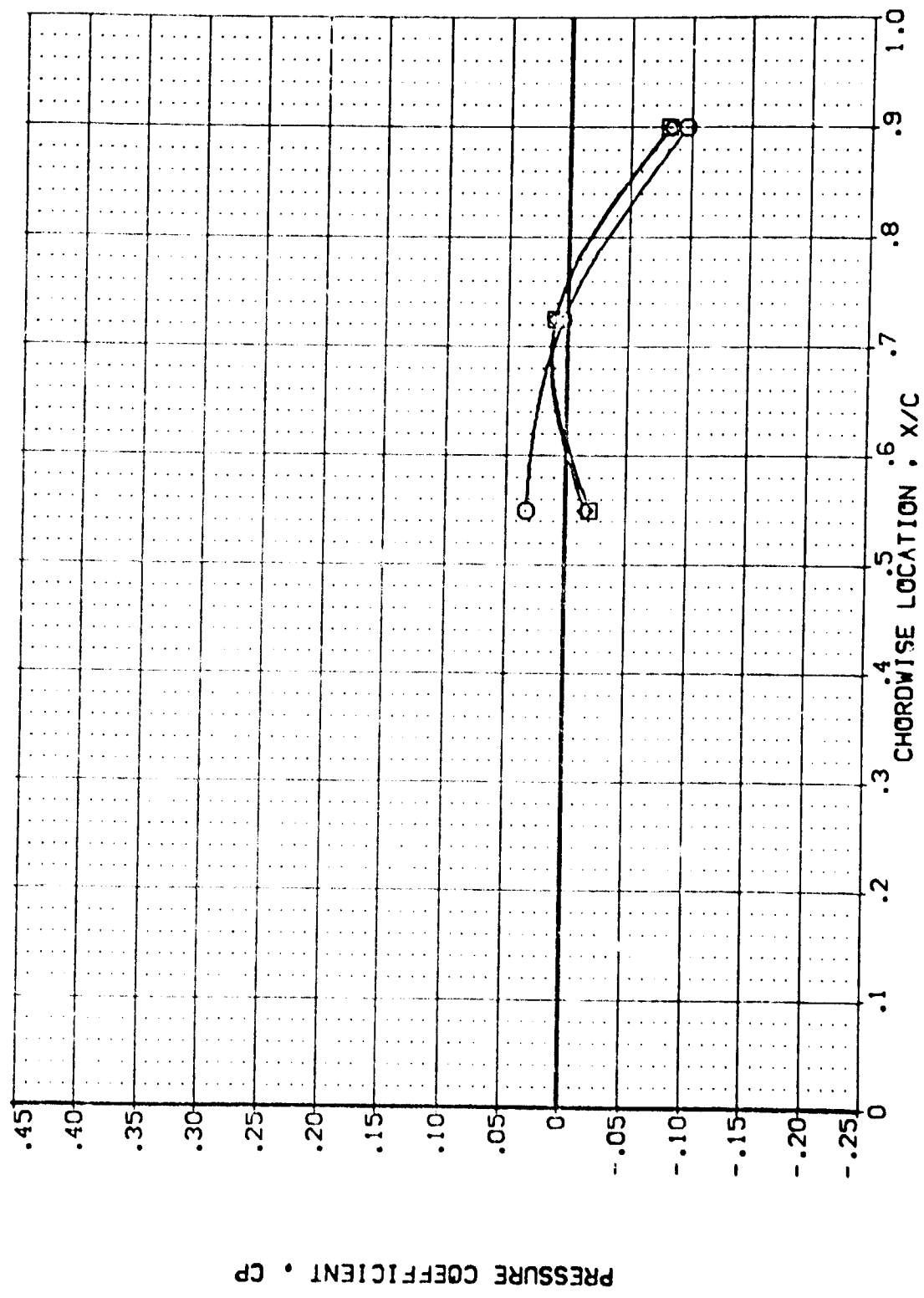
PRESSURE COEFFICIENT, CP



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .427

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SPR	QINBAL
(LBZ007)	AVES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LBZ078)	AVES 87-710 [A]ZC 03 T1 S1 LOWER WING PRESSURE	.000	31.260	.916	1.000
(LBZ082)	AVES 87-710 [A]ZC 04 T1 S1 LOWER WING PRESSURE	.000	31.260	.916	1.000



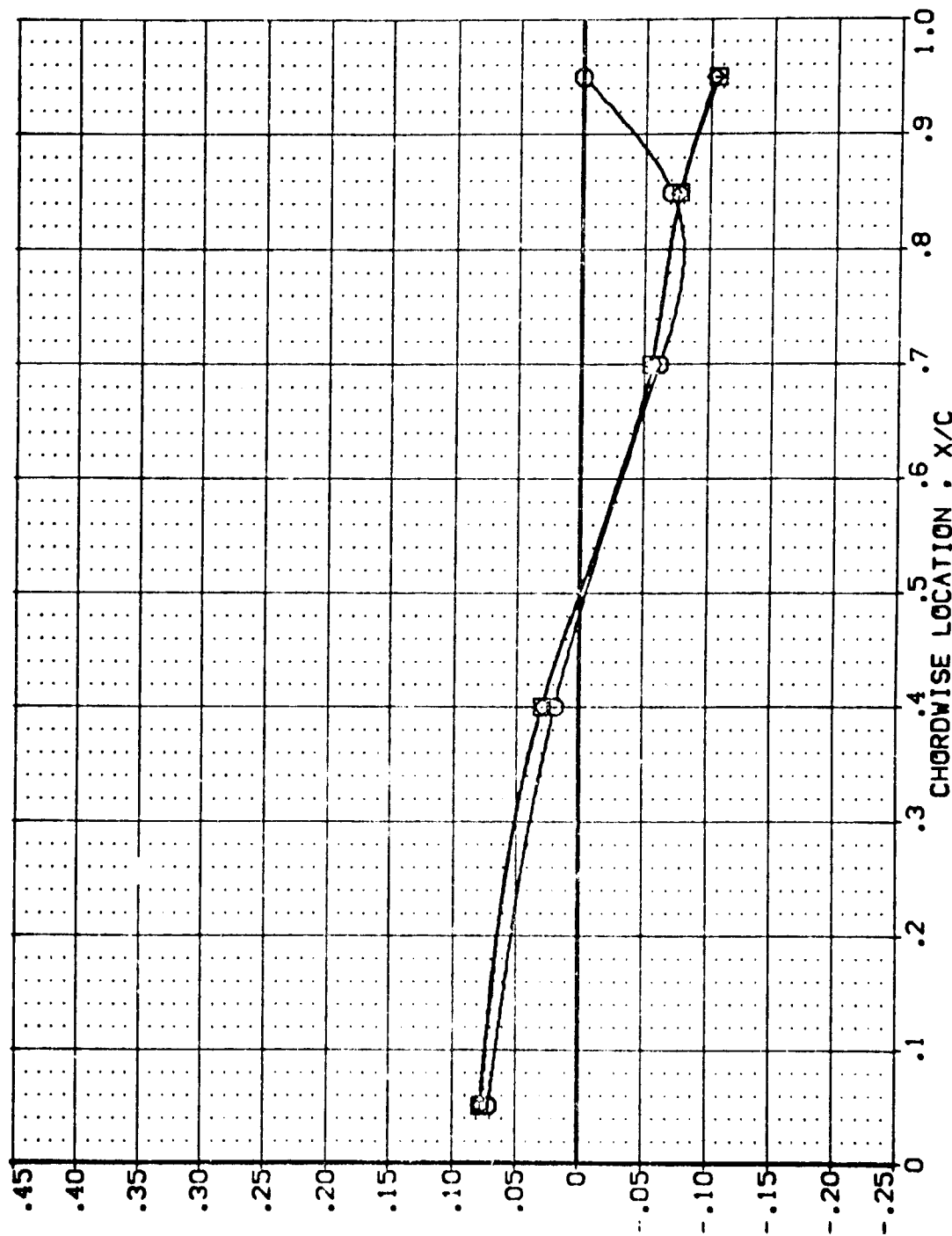
ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL
(LB2037)
(LB2078)
(LB2082)

CONFIGURATION DESCRIPTION
AVES 87-710 1A12C 01 T1 S1
AVES 87-710 1A12C 03 T1 S1
AVES 87-710 1A12C 04 T1 S1

POWER C/PK SR-PR GIMBAL
1.000
1.000
1.000
31.280
31.280
.916
.916



PRESSURE COEFFICIENT, CP

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .673

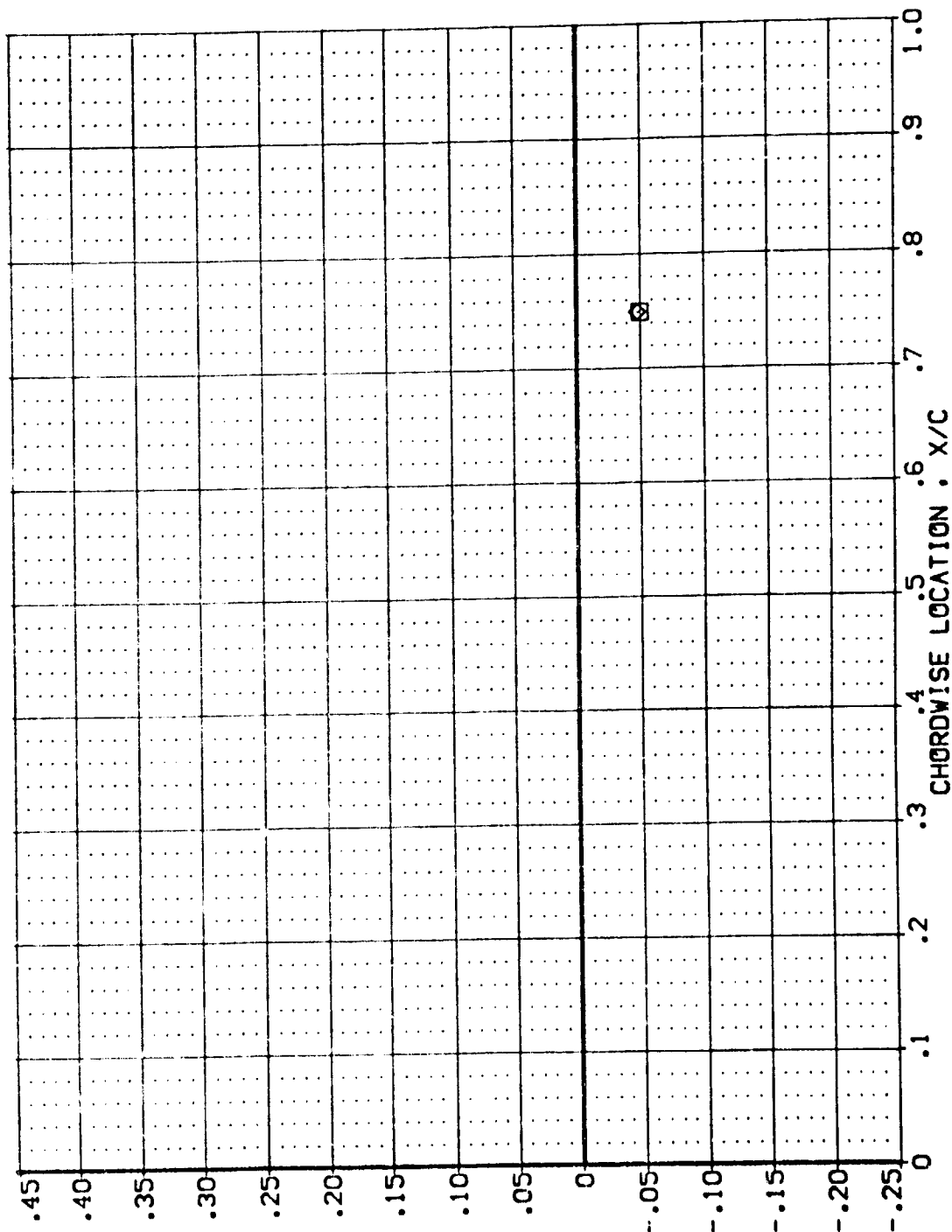
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ037)
(LBZ038)
(LBZ082)

ANES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
ANES 87-710 IAI2C 03 T1 S1 LOWER WING PRESSURE
ANES 87-710 IAI2C 04 T1 S1 LOWER WING PRESSURE

POWER DPR SMFR GIMBAL
.000 31.260 .916 1.000
1.000 31.260 .916 1.000

PRESSURE COEFFICIENT • CP



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

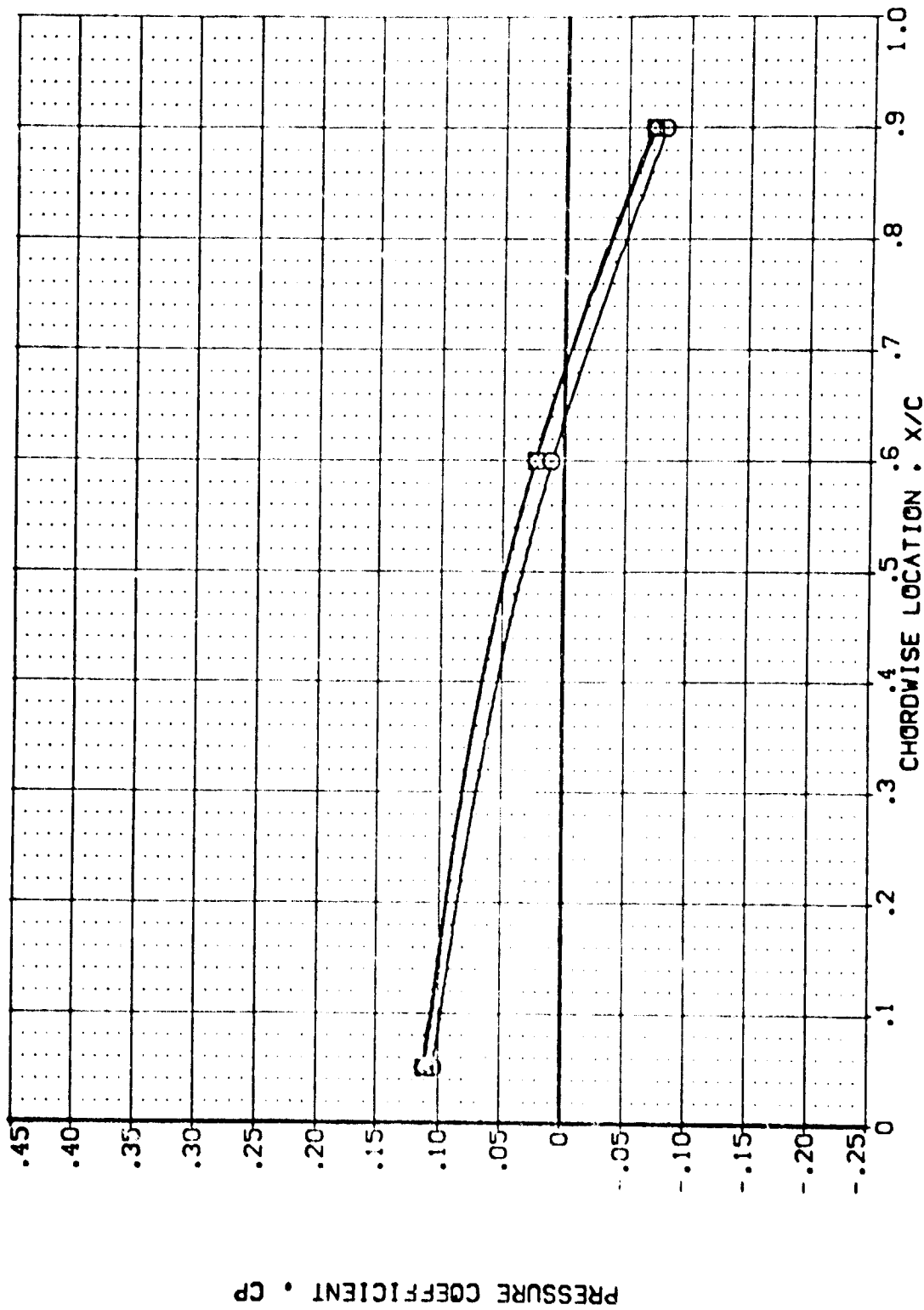
MACH = 2.500 ALPHA = .000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ037)
(LBZ078)
(LBZ082)

AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 03 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 04 T1 S1 LOWER WING PRESSURE

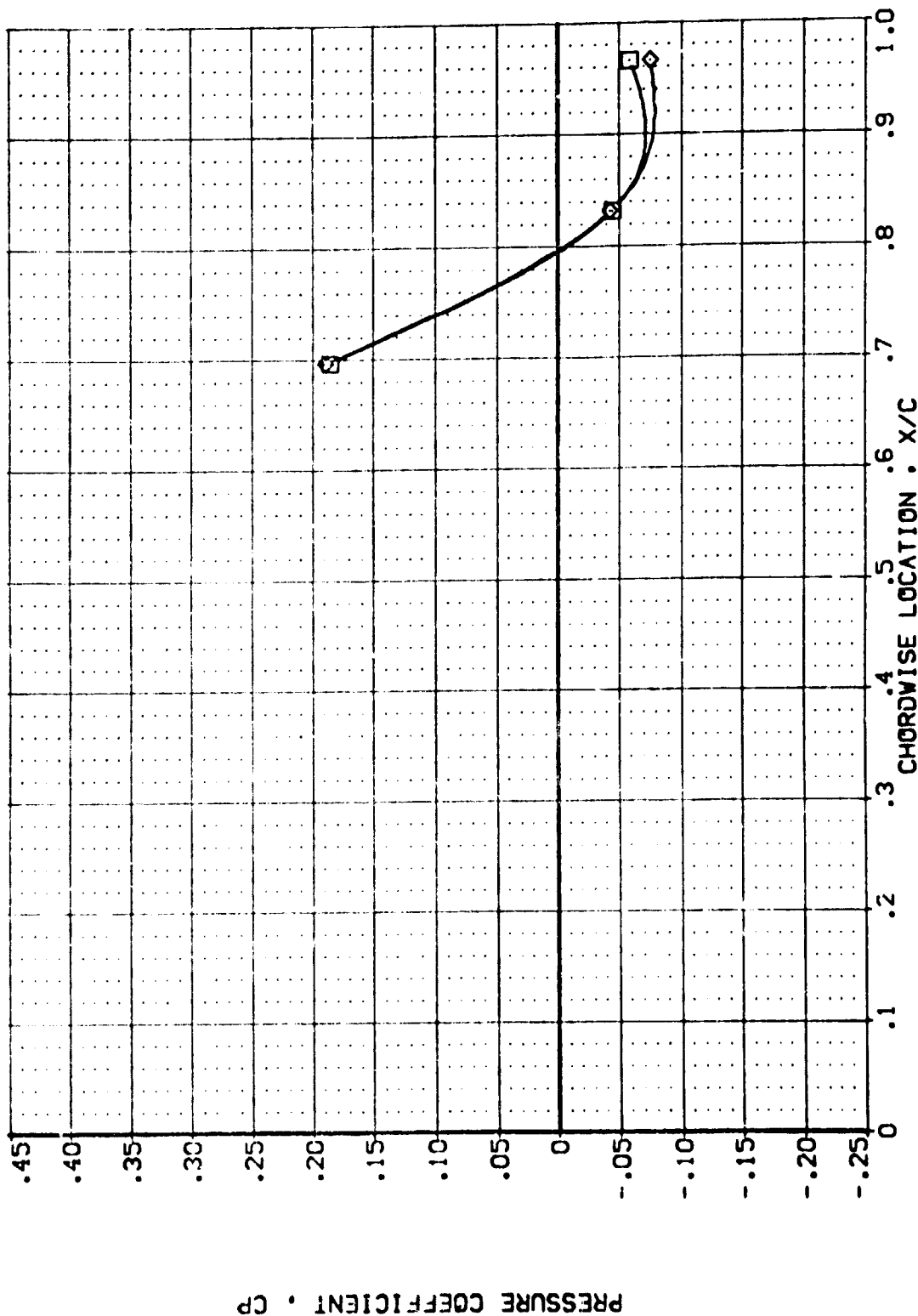
POWER SFR SFR-PR GIMBAL
.000 31.260 .916 1.000
1.000 31.260 .916 1.000
1.000 31.260 .916 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .887

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	QPR	SRPR	GIMBAL
(LB0007)	AVES 87-710 IAI2C C1 T1 S1 LOWER WING PRESSURE	1.000	31.260	.916	1.000
(LB0078)	AVES 87-710 IAI2C C3 T1 S1 LOWER WING PRESSURE	1.000	31.260	.916	1.000
(LB0082)	AVES 87-710 IAI2C C4 T1 S1 LOWER WING PRESSURE	1.000	31.260	.916	1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .299 PAGE 139

DATA SET SYMBOL

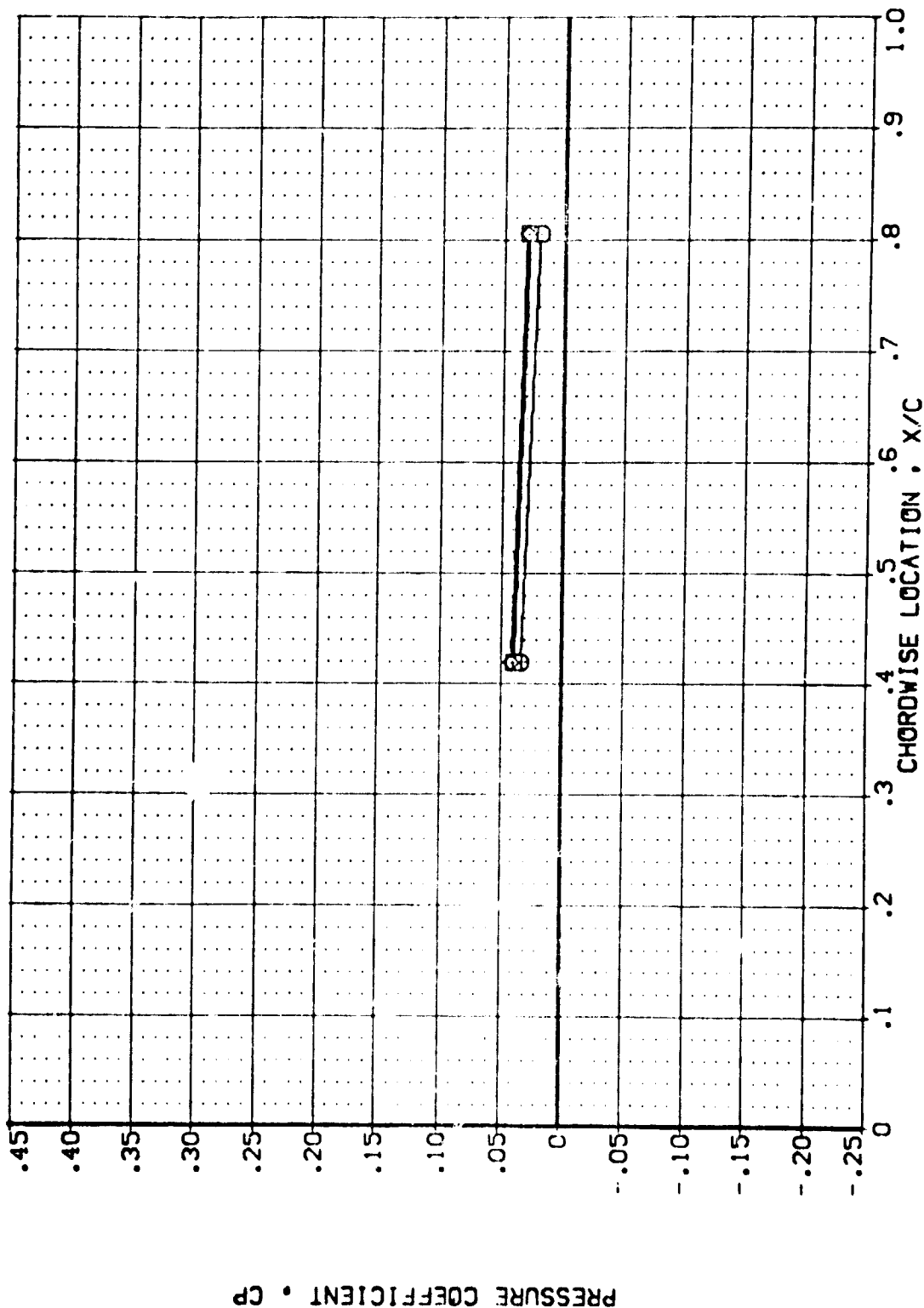
(LB2007)
(LB2078)
(LB2082)

CONFIGURATION DESCRIPTION

AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 1A12C 03 T1 S1 LOWER WING PRESSURE
AMES 87-710 1A12C 04 T1 S1 LOWER WING PRESSURE

POWER DPR SRPR GIMBAL

.000 31.260 .916 1.000
1.000 31.260 .916 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

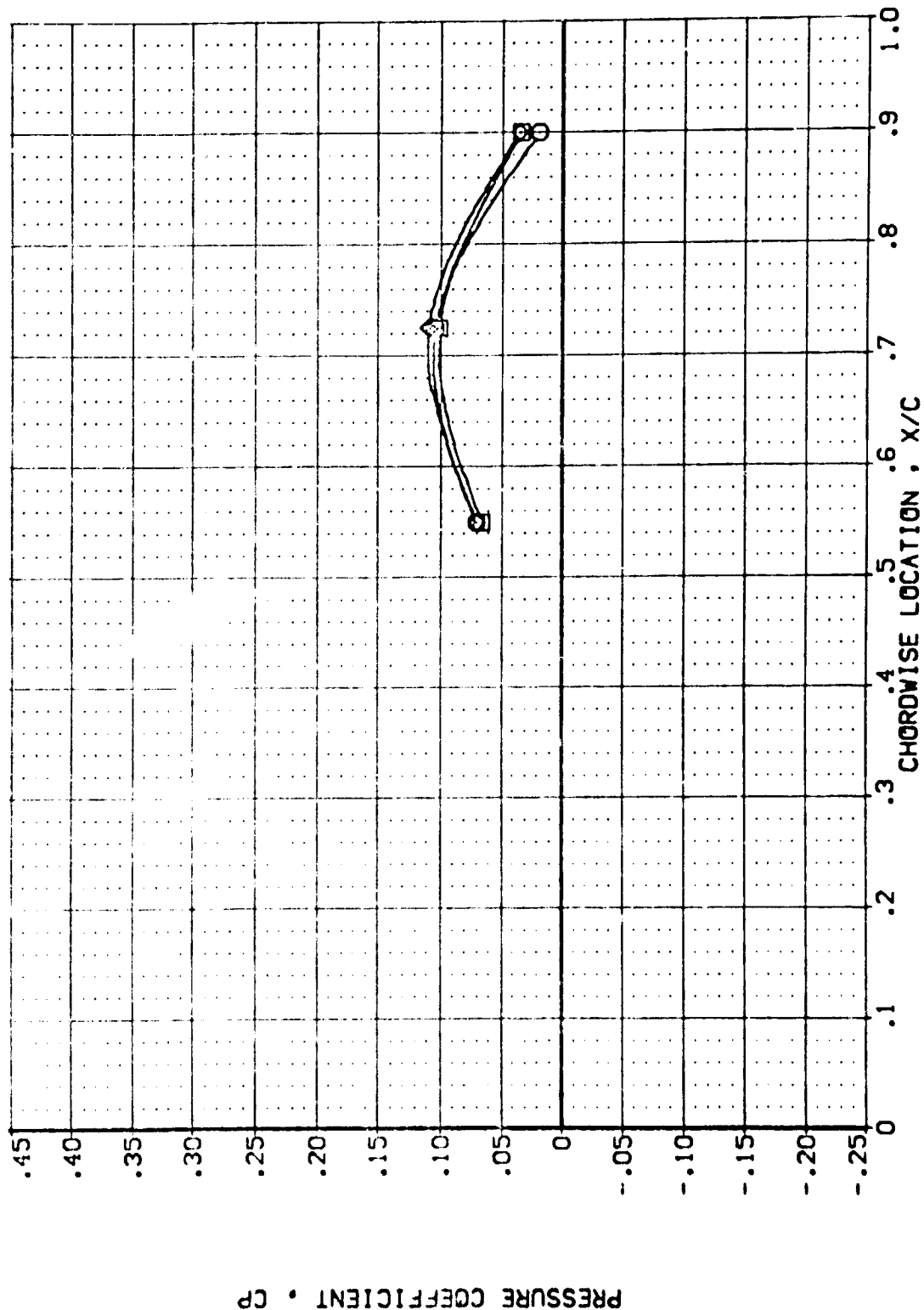
MACH = 2.500 ALPHA = 6.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/P G/MBAL

(LB2037) ASES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE 1.000 31.260 .916 1.000

(LB2078) ASES 87-710 IAL2C 03 T1 S1 LOWER WING PRESSURE 1.000 31.260 .916 1.000

(LB2082) ASES 87-710 IAL2C 04 T1 S1 LOWER WING PRESSURE 1.000 31.260 .916 1.000



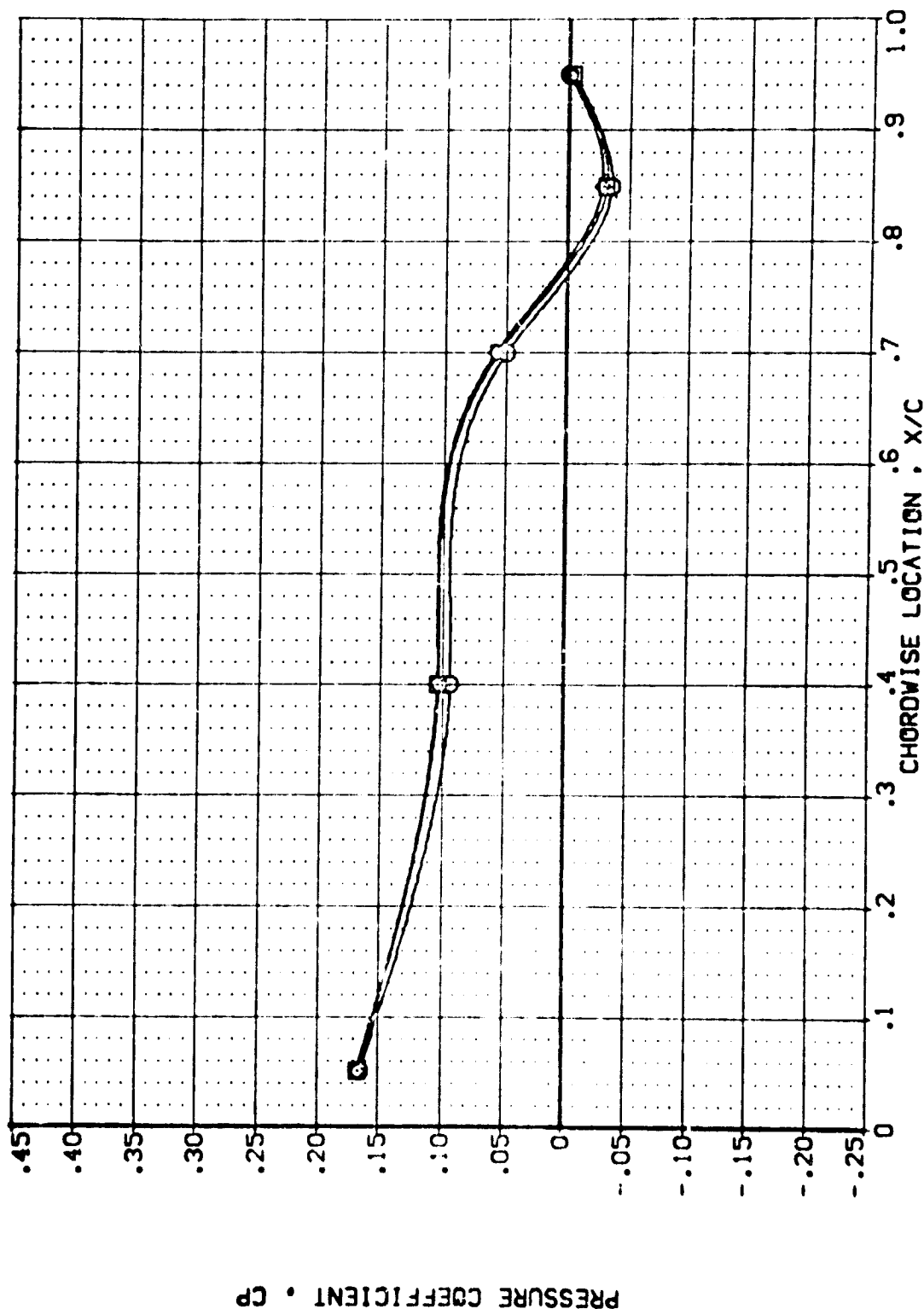
PRESSURE COEFFICIENT • CP

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

DATA SET SYMBOL
(LB0037)
(LB0078)
(LB0082)

CONFIGURATION DESCRIPTION
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 03 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 04 T1 S1 LOWER WING PRESSURE

POWER CDR SDRR GIMBAL
.000
1.000 31.260 .916 1.000
1.000 31.260 .916 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

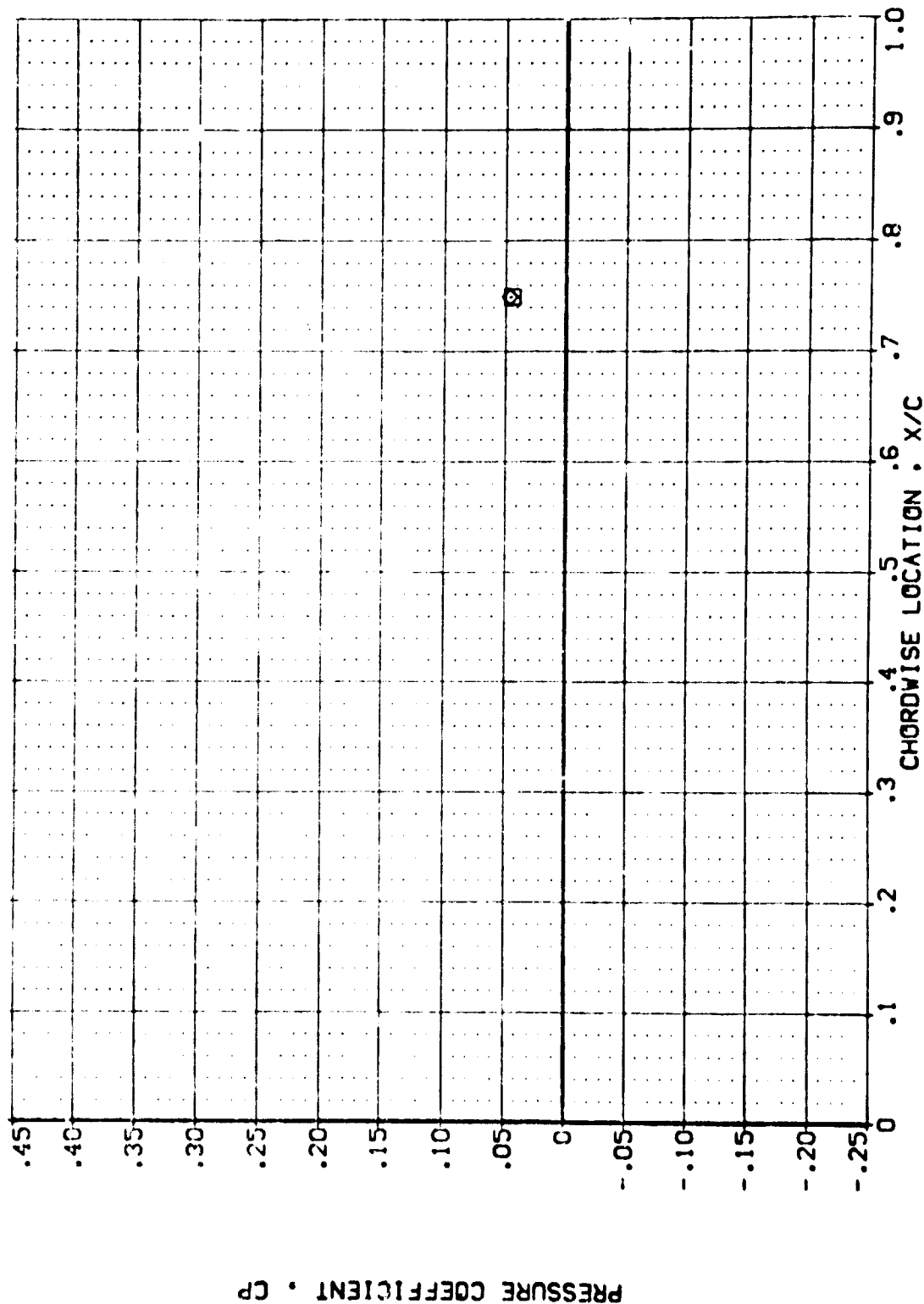
MACH = 2.500 ALPHA = 6.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/P/R Q/INBAL

(LB-3007) AYES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE .000 31.260 .916 1.000

(LB-3078) AYES 87-710 IAL2C 03 T1 S1 LOWER WING PRESSURE 1.000 31.260 .916 1.000

(LB-3082) AYES 87-710 IAL2C 04 T1 S1 LOWER WING PRESSURE 1.000 31.260 .916 1.000



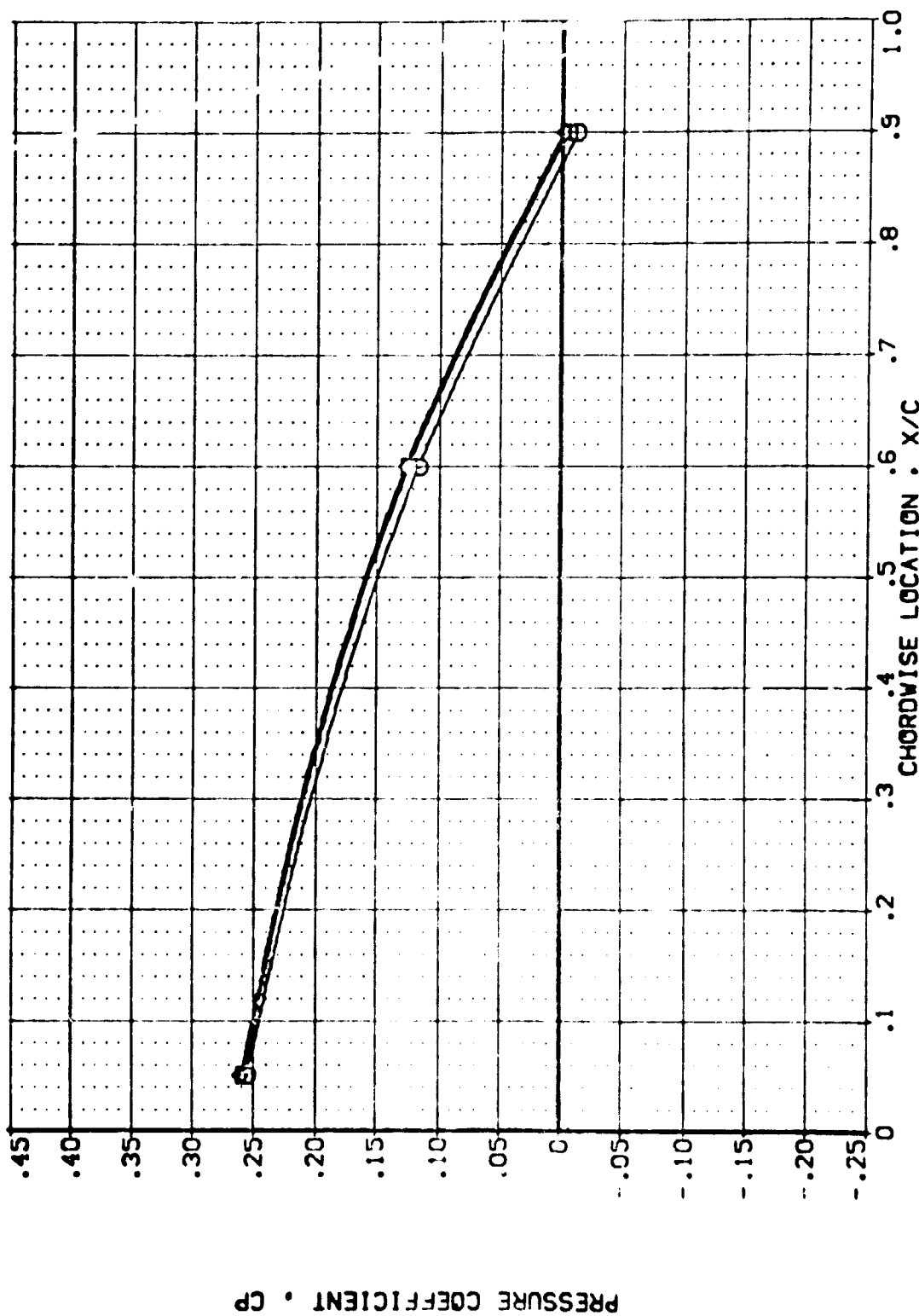
ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CDR SPRR GIMBAL

(LBZ007) ARES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE .000 31.260 .916 1.000

(LBZ008) ARES 87-710 1A12C 03 T1 S1 LOWER WING PRESSURE 1.000 31.260 .916 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

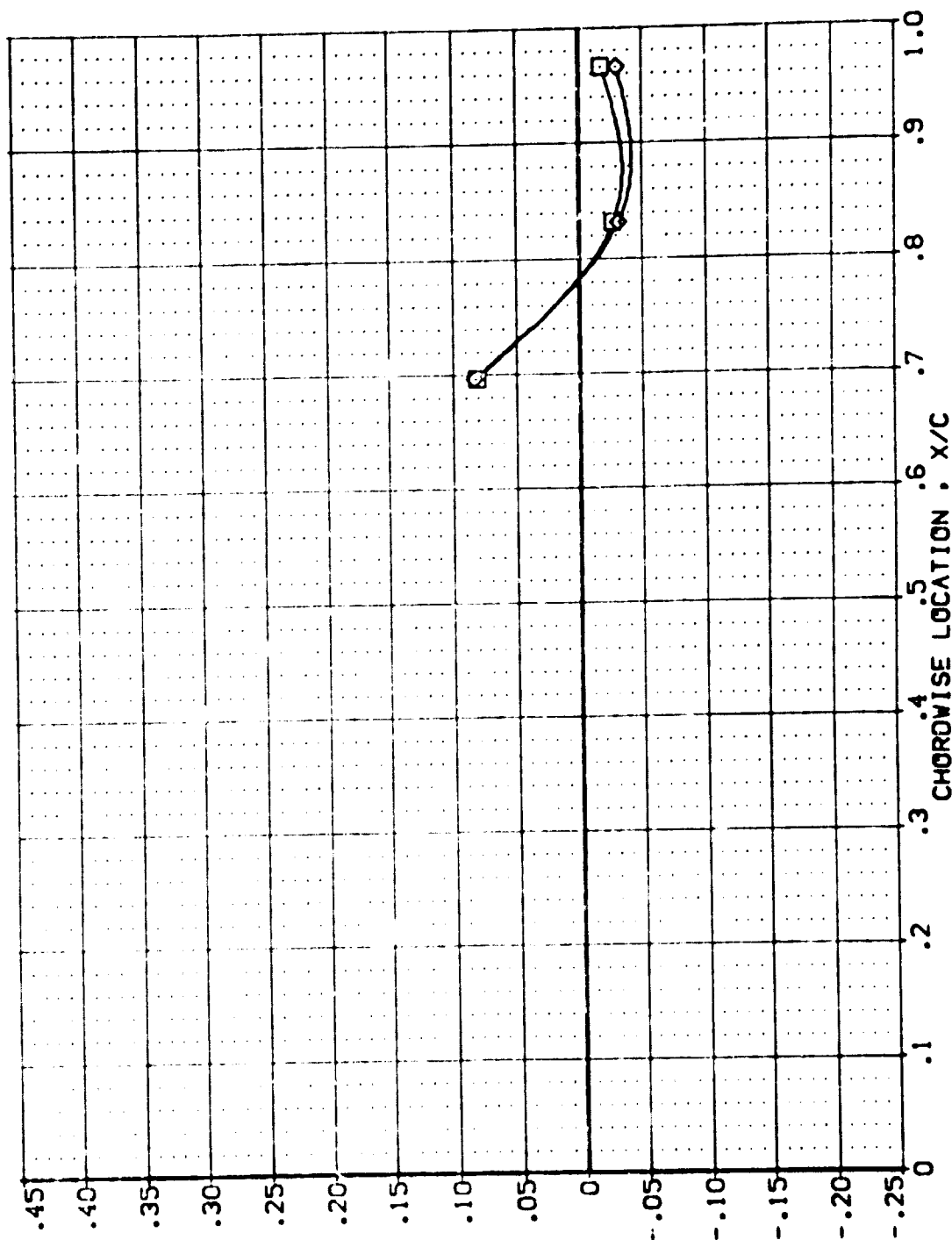
(LB7038)
(LB7039)
(LB7040)

APES 87-710 [A]ZC 01 T1 S1
APES 87-710 [A]ZC 03 T1 S1
APES 87-710 [A]ZC 04 T1 S1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER CPM SP-PR GIMBAL
.000 26.860 .768 1.000
1.000 26.860 .768 1.000
1.000 26.860 .768 1.000

PRESSURE COEFFICIENT • CP



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB2008)
(LB2079)
(LB2083)

AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 TI SI
IA12C 03 TI SI
IA12C 04 TI SI

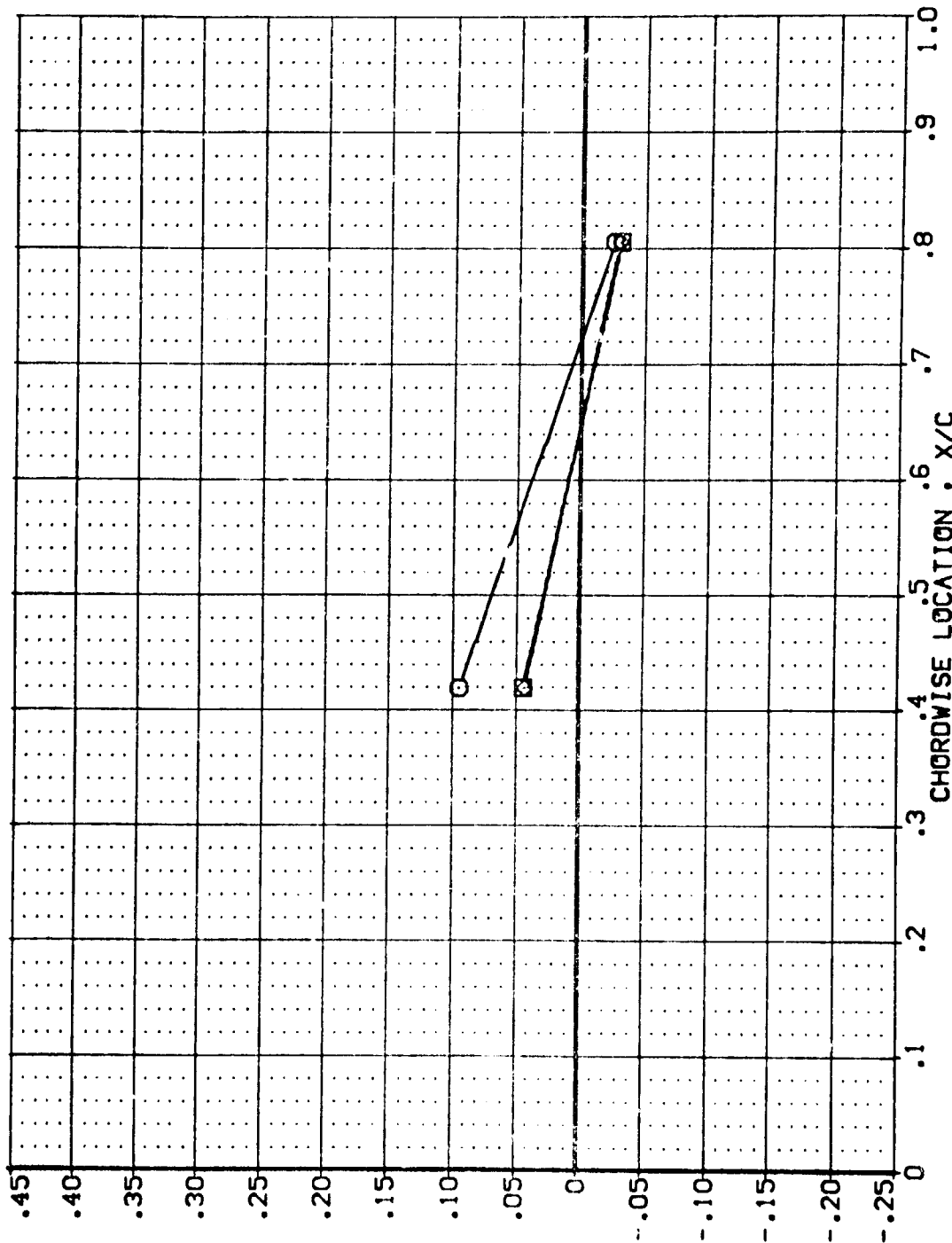
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER 0.000
0.000
1.000

CPR 26.860
26.860
26.860

SRPR 0.768
0.768
0.768

GPMIAL 1.000
1.000
1.000



PRESSURE COEFFICIENT • CP

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .427

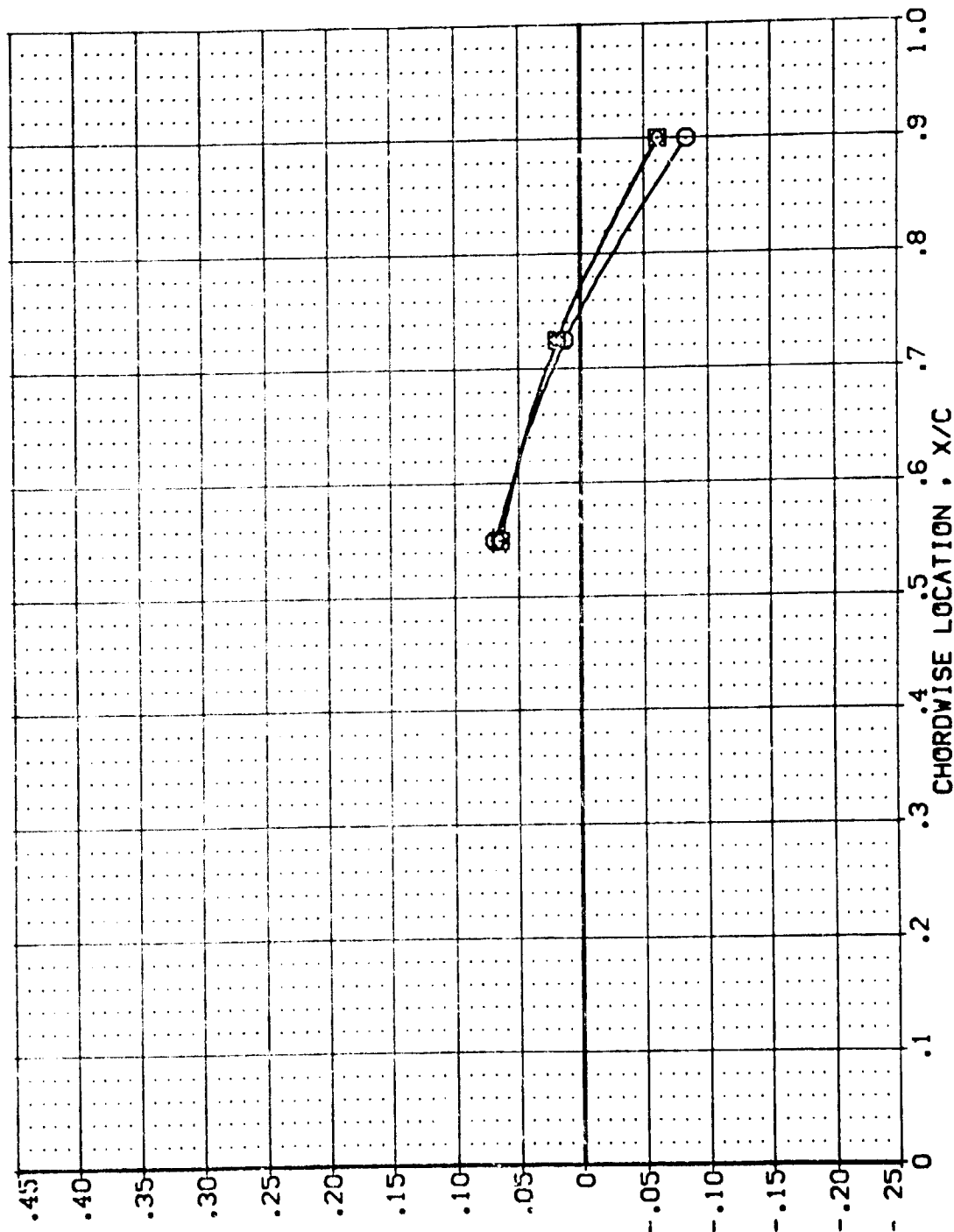
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ038)
(LBZ073)
(LBZ083)

AVES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 [A] 2C 03 T1 S1 LOWER WING PRESSURE
AVES 87-710 [A] 2C 04 T1 S1 LOWER WING PRESSURE

POWER 0.000 26.860 26.860
GIMBAL 1.000 .768 1.000

PRESSURE COEFFICIENT, CP



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL

(LBZ038)
(LBZ079)
(LBZ080)

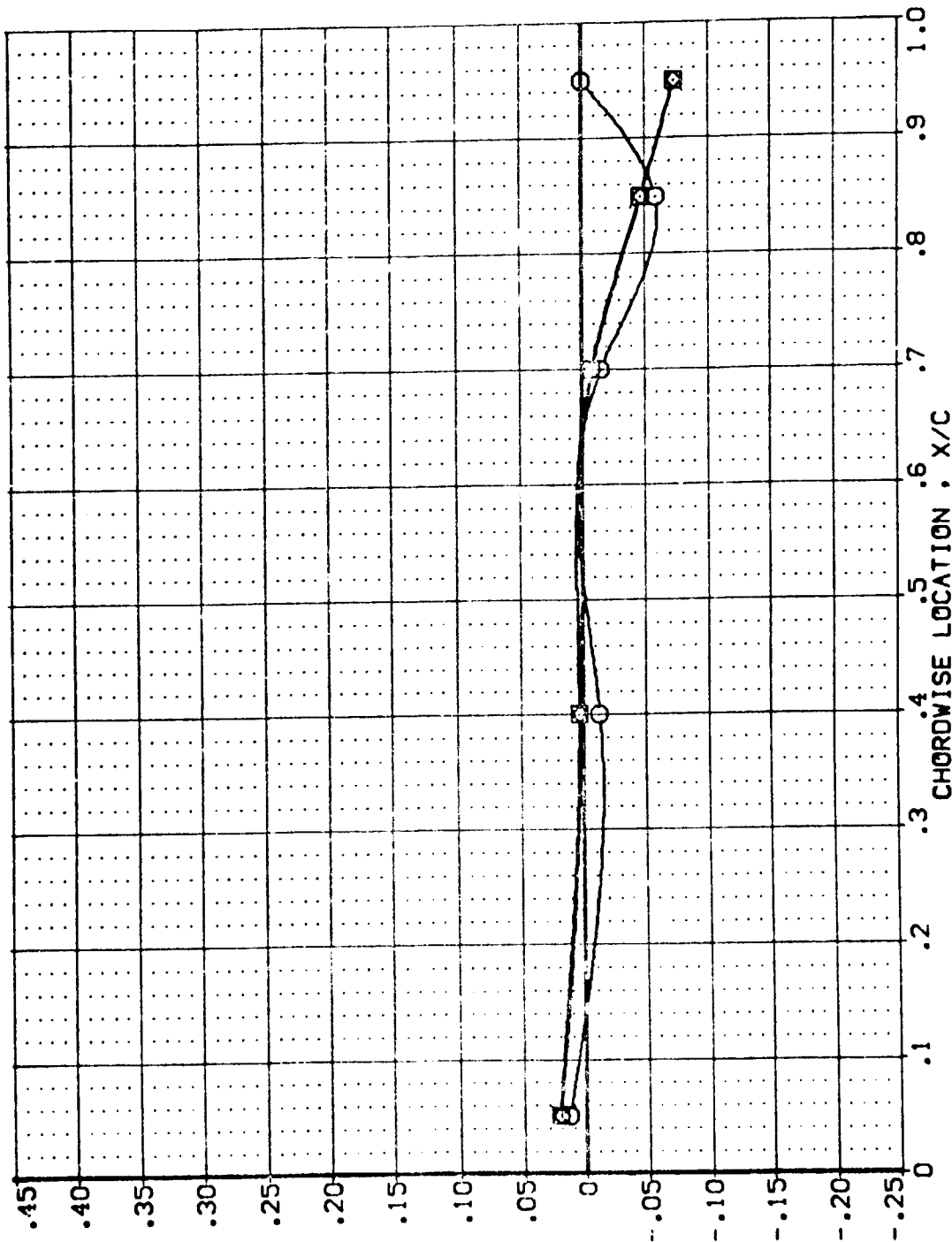
CONFIGURATION DESCRIPTION

AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AYES 87-710 IAI2C 03 T1 S1 LOWER WING PRESSURE
AYES 87-710 IAI2C 04 T1 S1 LOWER WING PRESSURE

POWER DPR ST-PR GIMBAL

.000
1.000 26.860
1.000 26.860
1.000 .768
1.000 .768

PRESSURE COEFFICIENT, CP



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

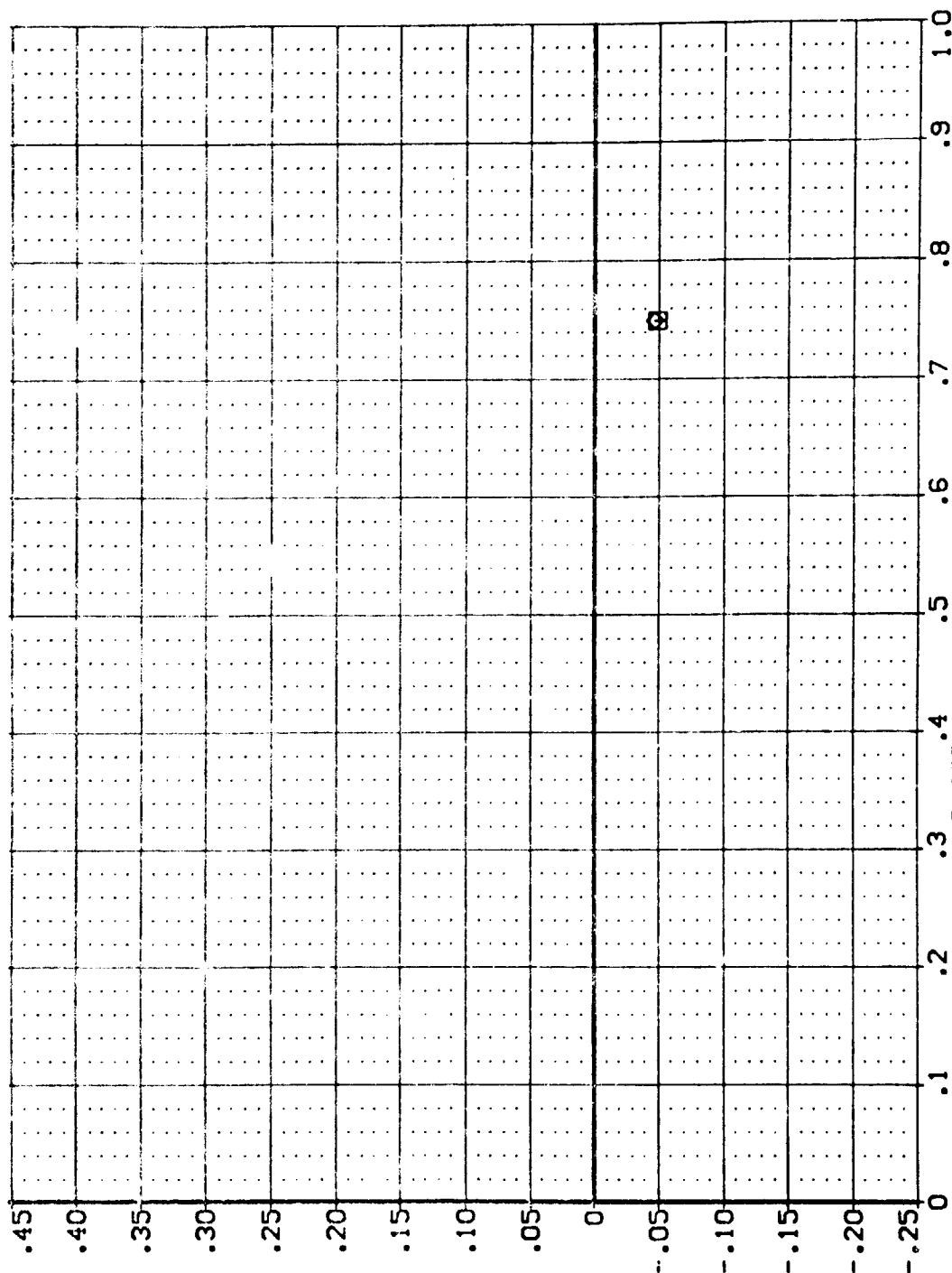
(LB2038)
(LB2079)
(LB2083)

APES 87-710
APES 87-710
APES 87-710

POWER QPR SPMR GIMBAL
.000 .000
1.000 26.850 .788
1.000 26.850 .788

LOWER VING PRESSURE
LOWER VING PRESSURE
LOWER VING PRESSURE

1A12C 01 T1 S1
1A12C 03 T1 S1
1A12C 04 T1 S1



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .780

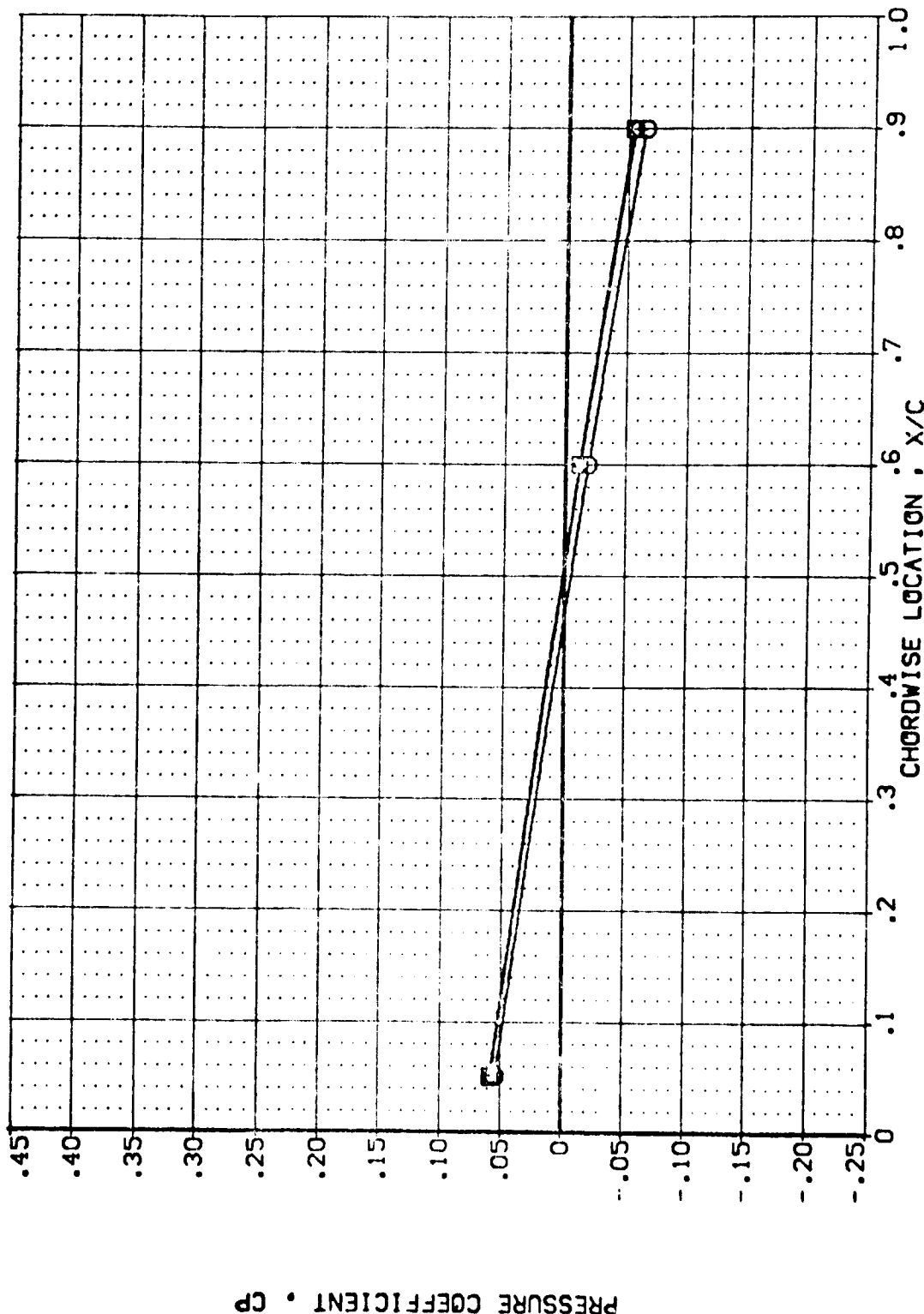
DATA SET SYMBOL

(LBZ038)
(LBZ079)
(LBZ083)

CONFIGURATION DESCRIPTION

AVES 87-710 IALZC 01 TI SI LOWER WING PRESSURE
AVES 87-710 IALZC 03 TI SI LOWER WING PRESSURE
AVES 87-710 IALZC 04 TI SI LOWER WING PRESSURE

POWER .000
OPR 26.860
SRPR .768
GIMBAL 1.000
1.000
1.000



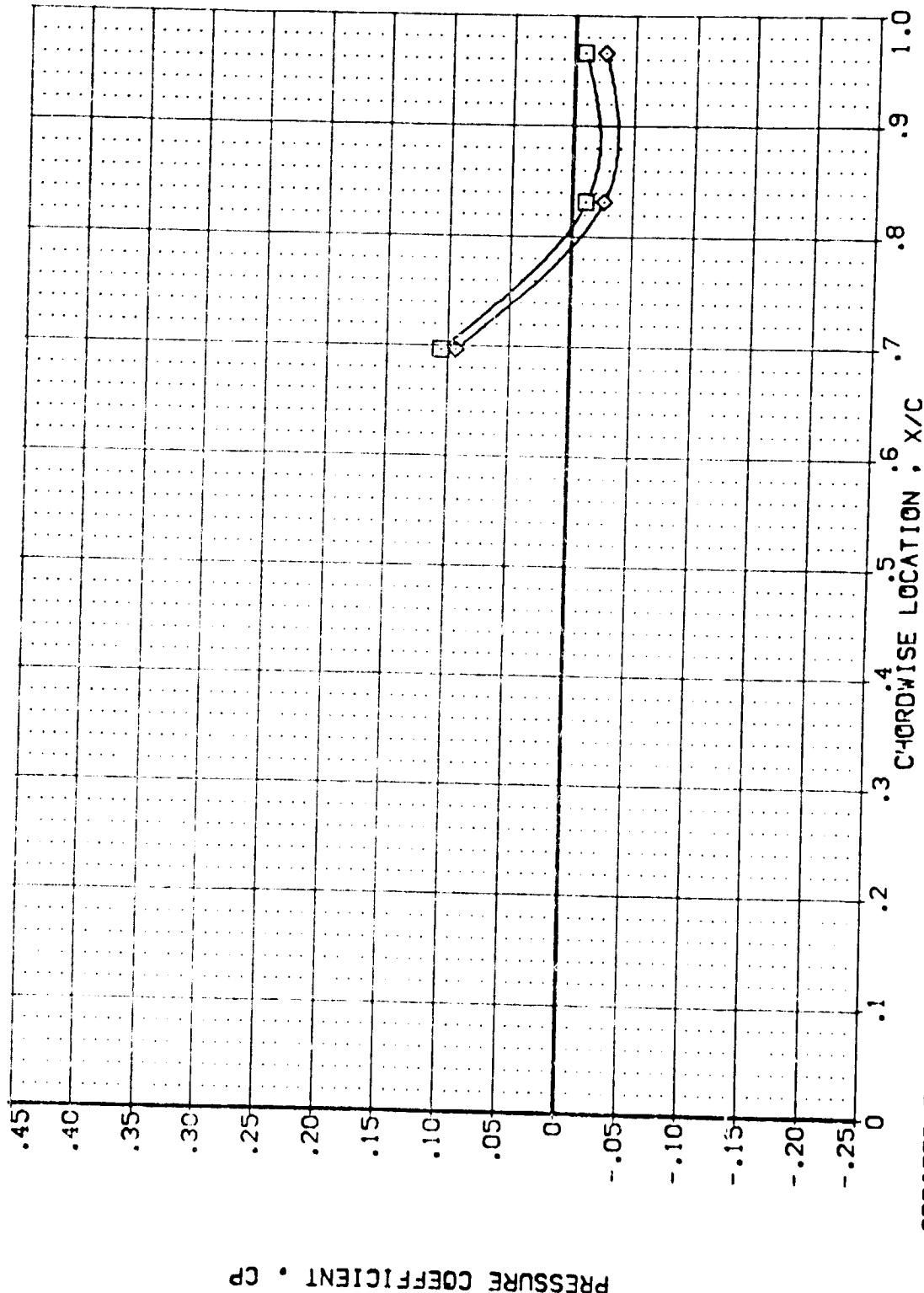
ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL
(LBZ001)
(LBZ002)
(LBZ003)

CONFIGURATION DESCRIPTION
AVES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 [A] 2C 03 T1 S1 LOWER WING PRESSURE
AVES 87-710 [A] 2C 04 T1 S1 LOWER WING PRESSURE

POWER 0-R SG-PR GIMBAL
.000 .788 1.000
1.000 26.830 1.000
1.000 26.860 1.000



PRESSURE COEFFICIENT • CP

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB7038)
(LB7079)
(LB7083)

AMES 87-710
AMES 87-710
AMES 87-710

IA12C 01 TI SI
IA12C 03 TI SI
IA12C 04 TI SI

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER

.000
1.000
1.000

QPR

25.860
25.860
25.860

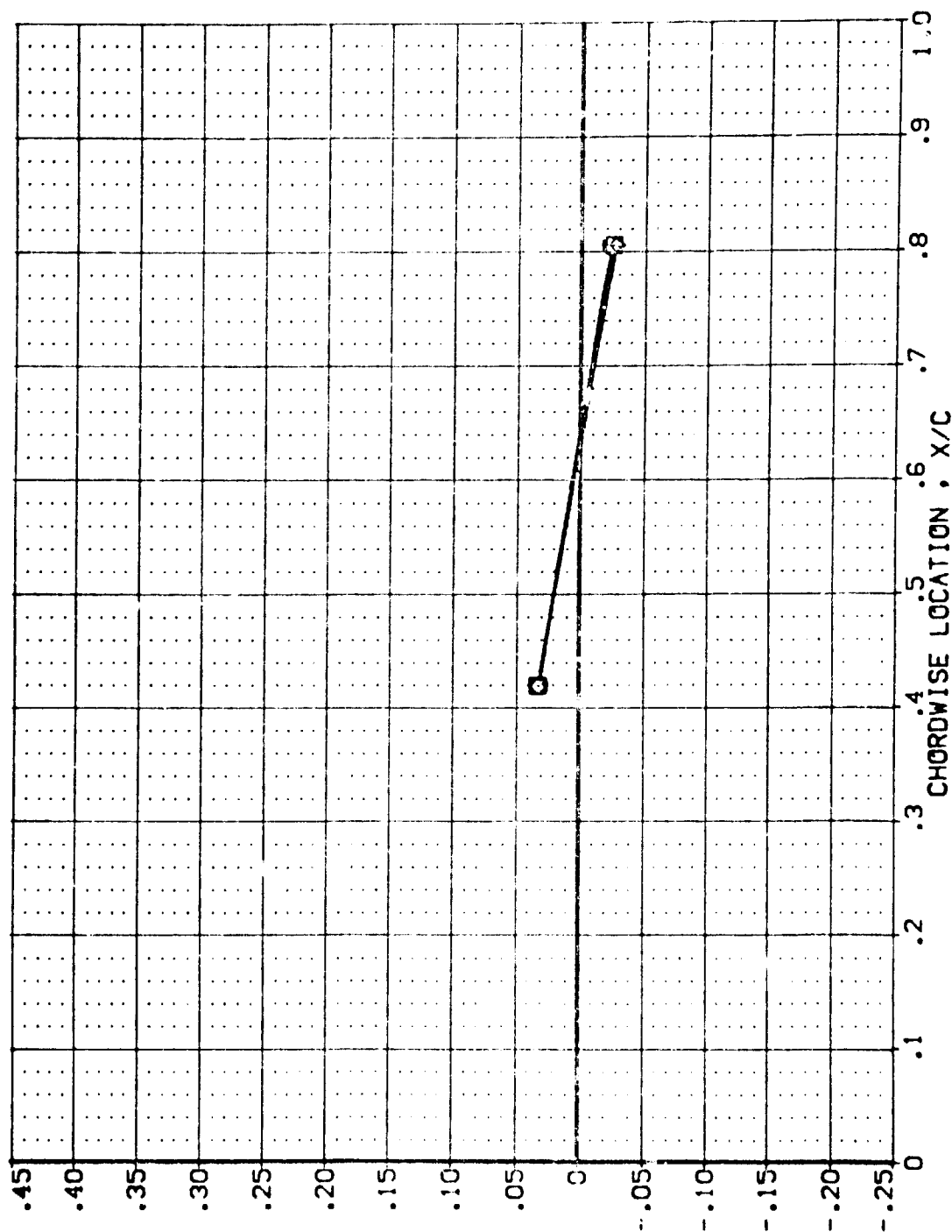
SNPPR

.768
.768
.768

GINBAL

1.000
1.000
1.000

PRESSURE COEFFICIENT, CP

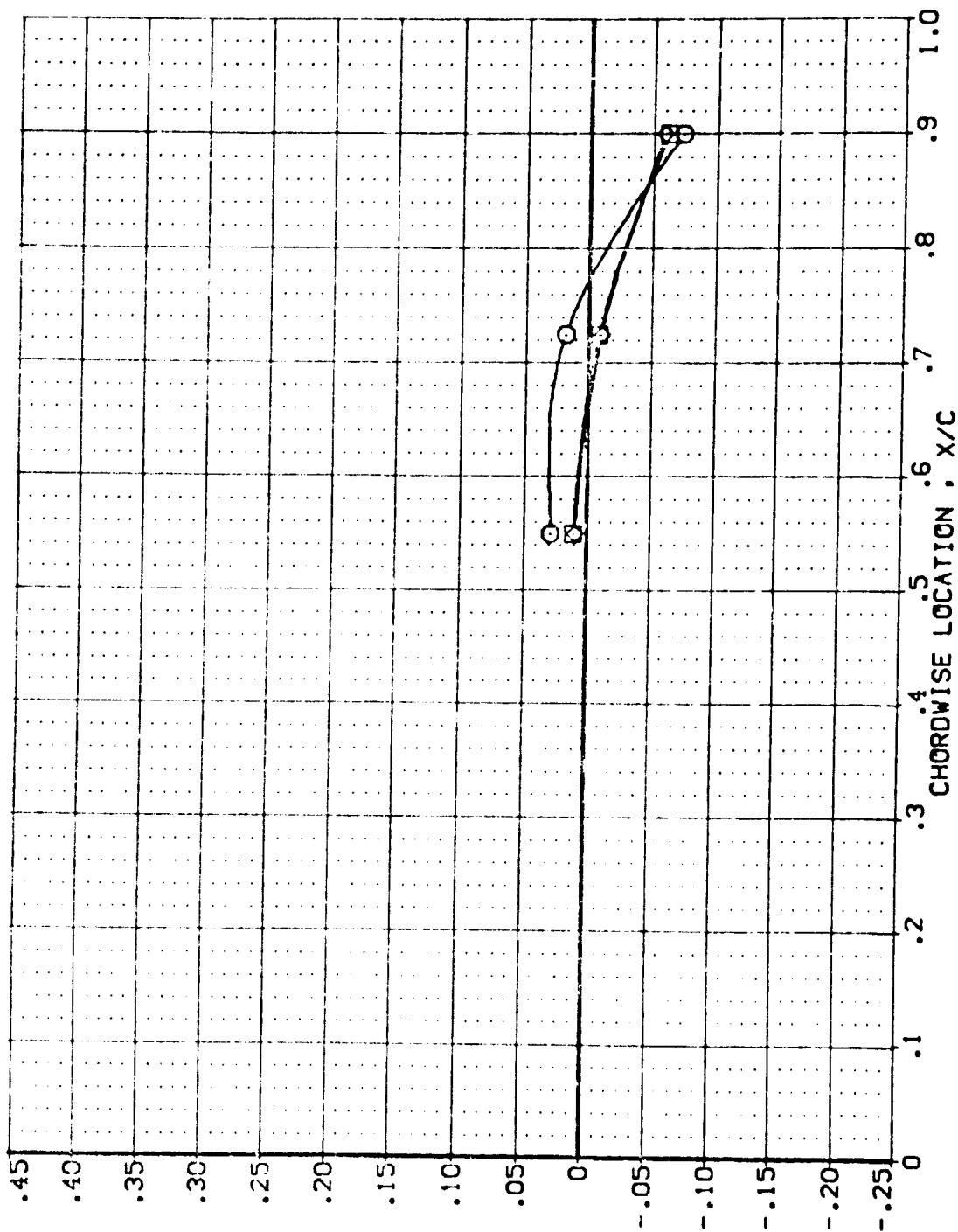


ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LB2038) APES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE
 (LB2079) APES 87-710 [A12C 03 T1 S1] LOWER WING PRESSURE
 (LB2093) APES 87-710 [A12C 04 T1 S1] LOWER WING PRESSURE

POWER DPR ST-PRR GIMBAL
 .000 26.860 .768 1.000
 1.000 26.860 .768 1.000



PRESSURE COEFFICIENT, CP

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .534

DATA SET SYMBOL

(LBZ038)
(LBZ079)
(LBZ080)

APES 87-710
APES 87-710
APES 87-710

CONFIGURATION DESCRIPTION

IA12C 01 T1 S1
IA12C 03 T1 S1
IA12C 04 T1 S1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER

.000
1.000
1.000

OPR

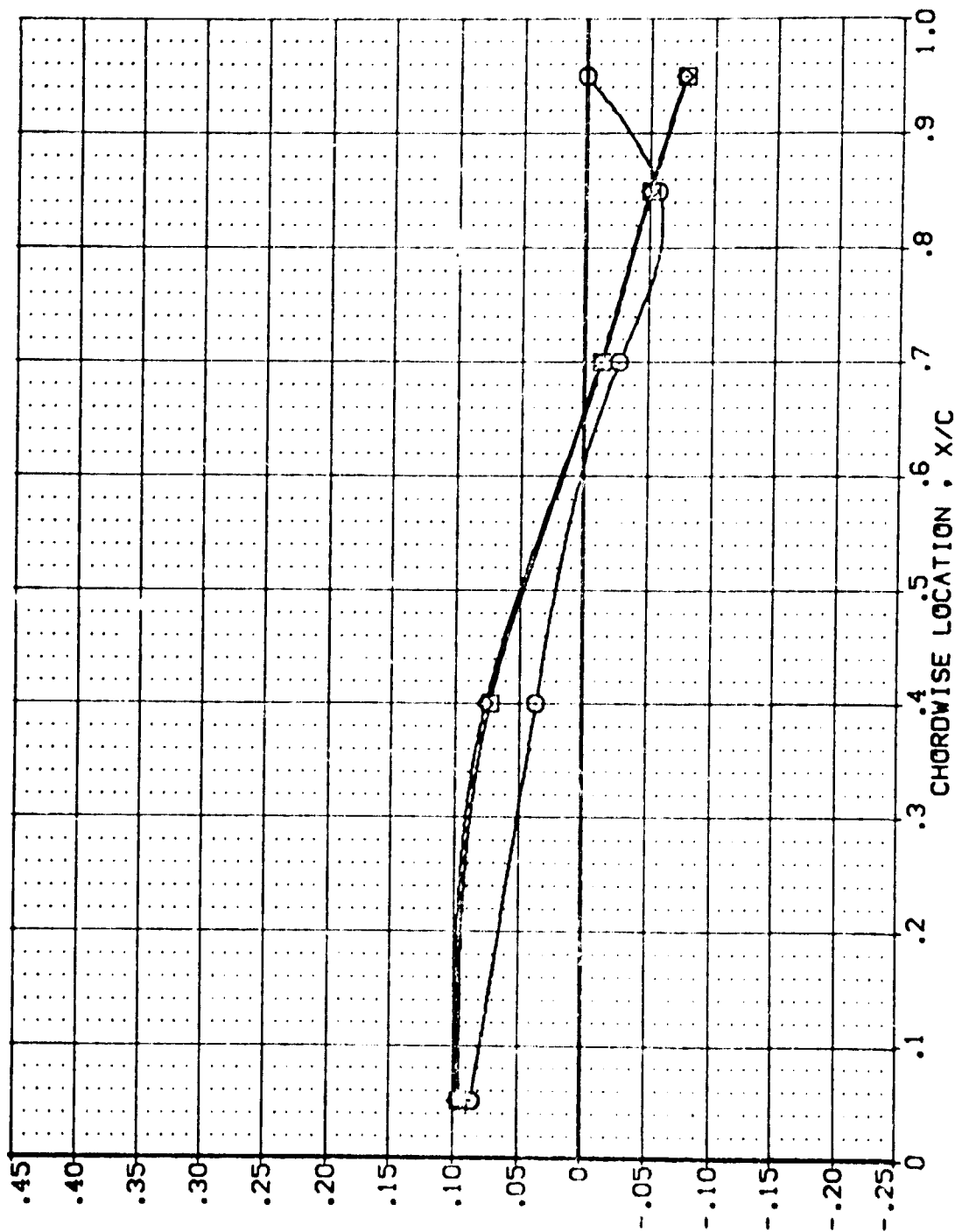
26.860
26.860

SQMPR

.768
.768

GIMBAL

1.000
1.000
1.000



PRESSURE COEFFICIENT, CP

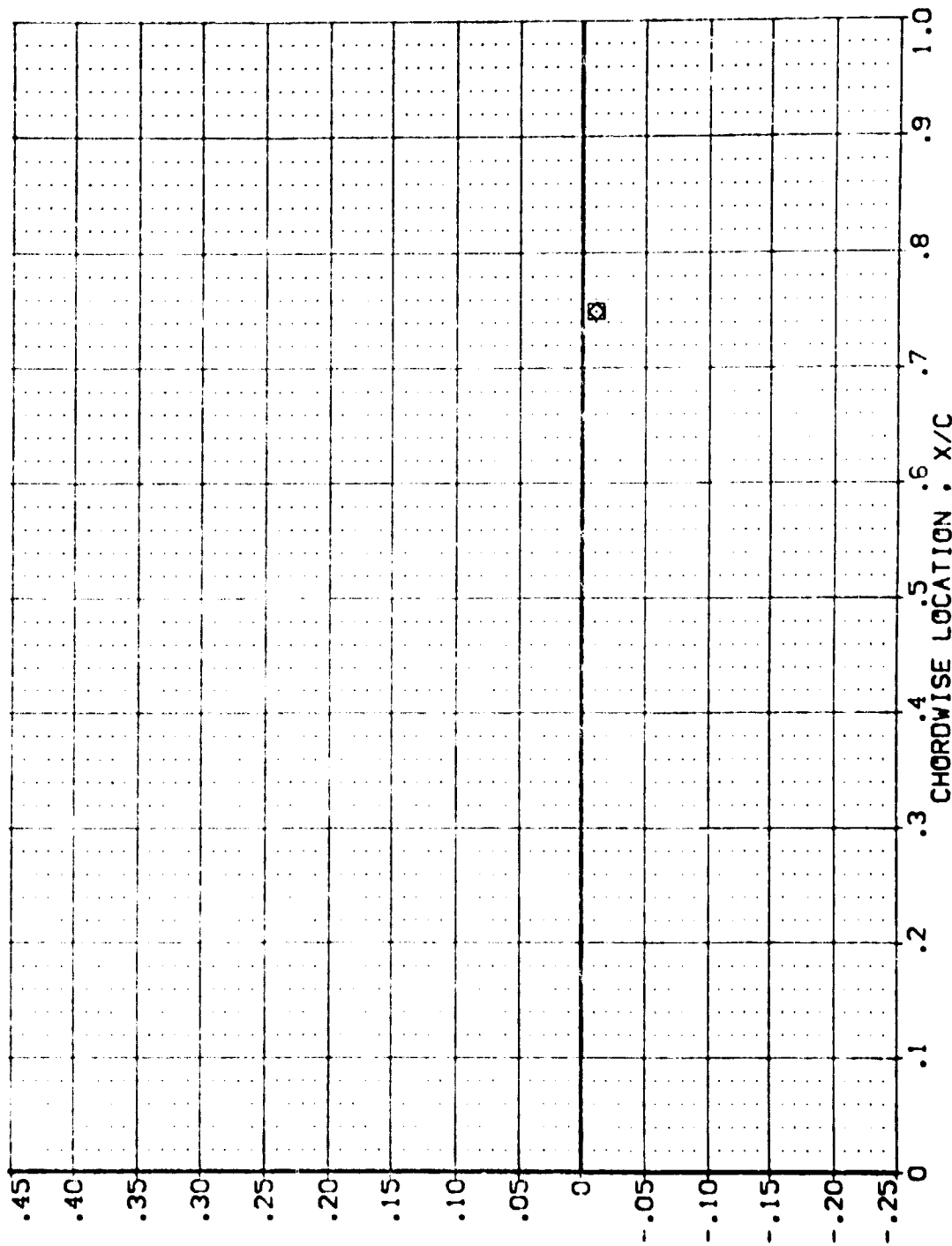
CHORDWISE LOCATION, X/C

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LB7008) AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LB7079) AMES 87-710 1A12C 03 T1 S1 LOWER WING PRESSURE
 (LB7083) AMES 87-710 1A12C 04 T1 S1 LOWER WING PRESSURE

POWER DFR SDFR GIMBAL
 .000 26.860 .768 1.000
 1.000 26.150 1.000 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

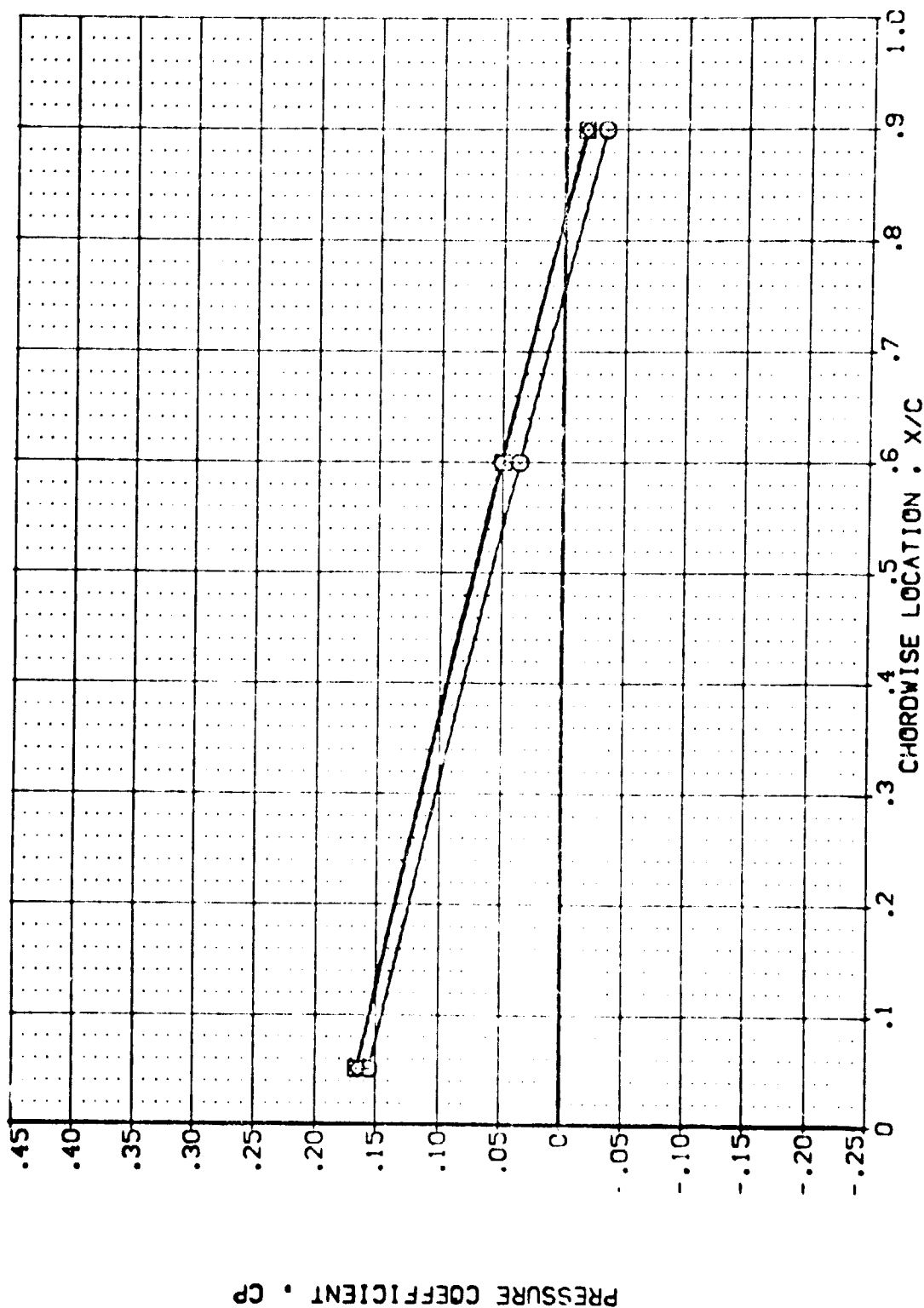
MACH = 3.000 ALPHA = .000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ008)
(LBZ079)
(LBZ083)

AYES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE
AYES 87-710 IAI2C 03 TI SI LOWER WING PRESSURE
AYES 87-710 IAI2C 04 TI SI LOWER WING PRESSURE

POWER 0.000 26.860 26.860
DPR 1.000 1.000 1.000
SR-PR 768 768 768
RIMBAL 1.000 1.000 1.000

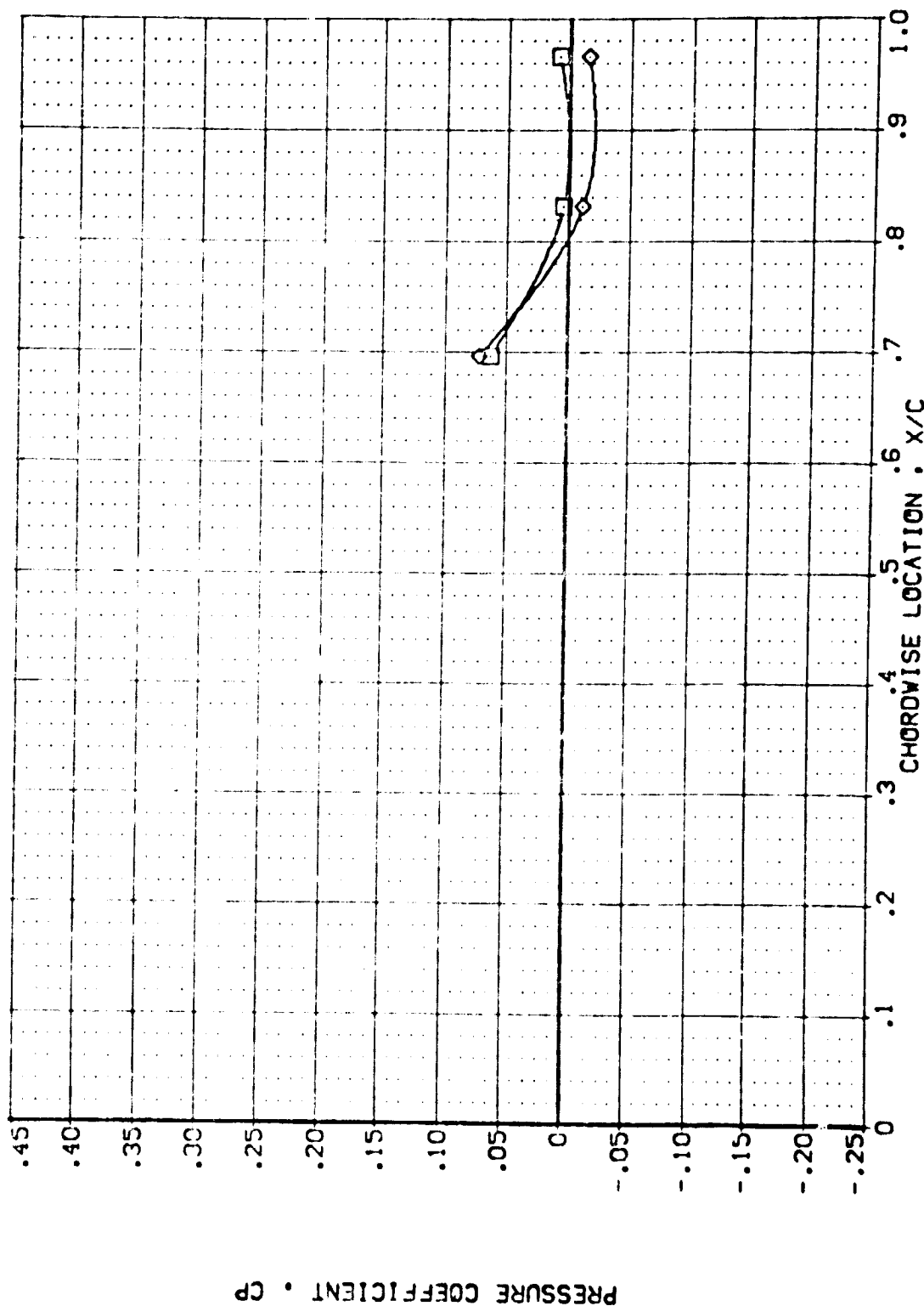


ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZ028) AYES 87-710 [A] 2C 01 [T] S1 LOWER WING PRESSURE
 (LBZ029) AYES 87-710 [A] 2C 03 [T] S1 LOWER WING PRESSURE
 (LBZ003) AYES 87-710 [A] 2C 04 [T] S1 LOWER WING PRESSURE

POWER 0-R SUPR GIMBAL
 .000 .768 1.000
 1.000 .768 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

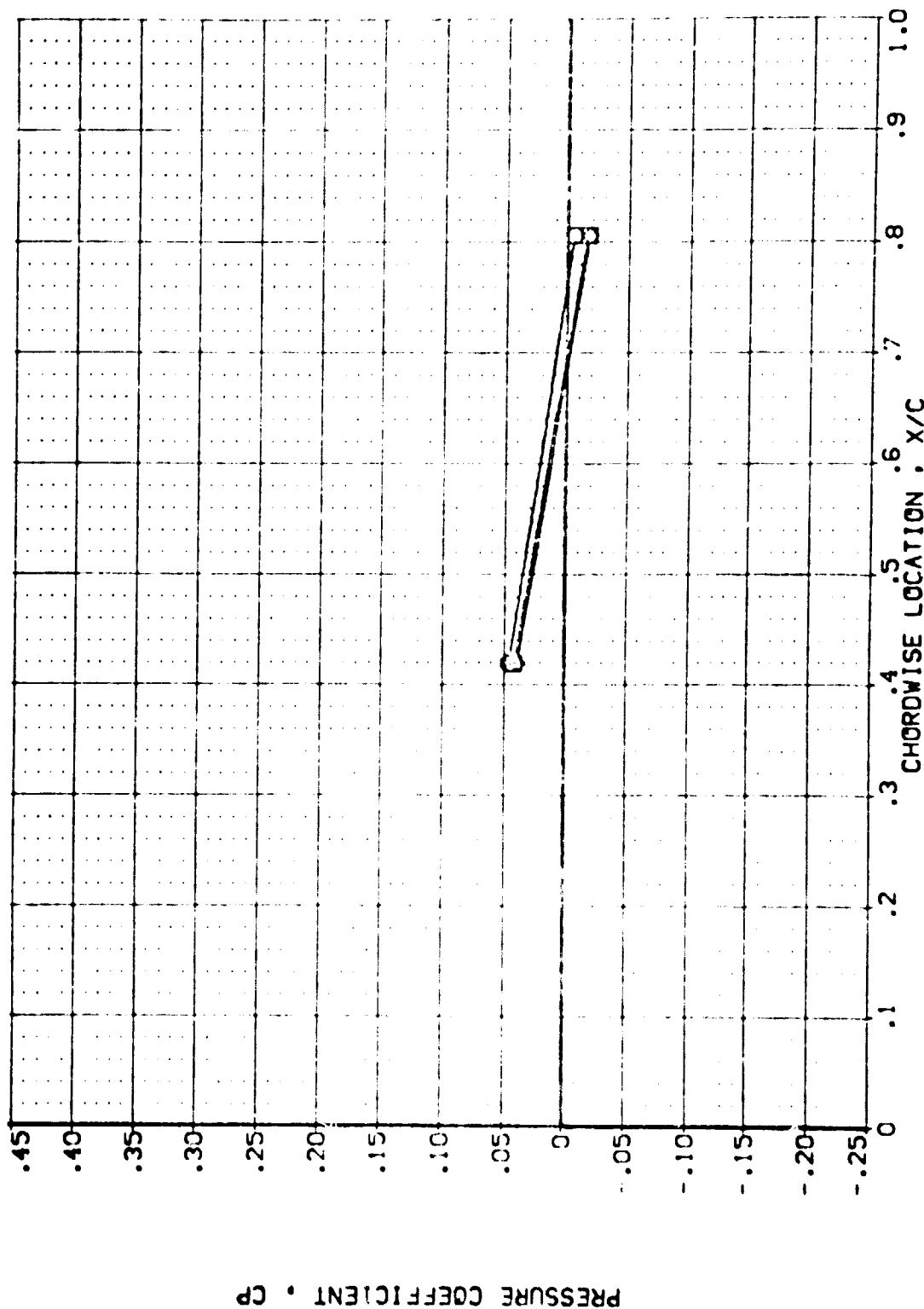
(1.80008)
(1.80008)
(1.80008)

AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 TI SI
IA12C 03 TI SI
IA12C 04 TI SI

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER DPR S2-PR GIMBAL
1.000
1.000
1.000
26.860
26.860
26.860
768
768
768

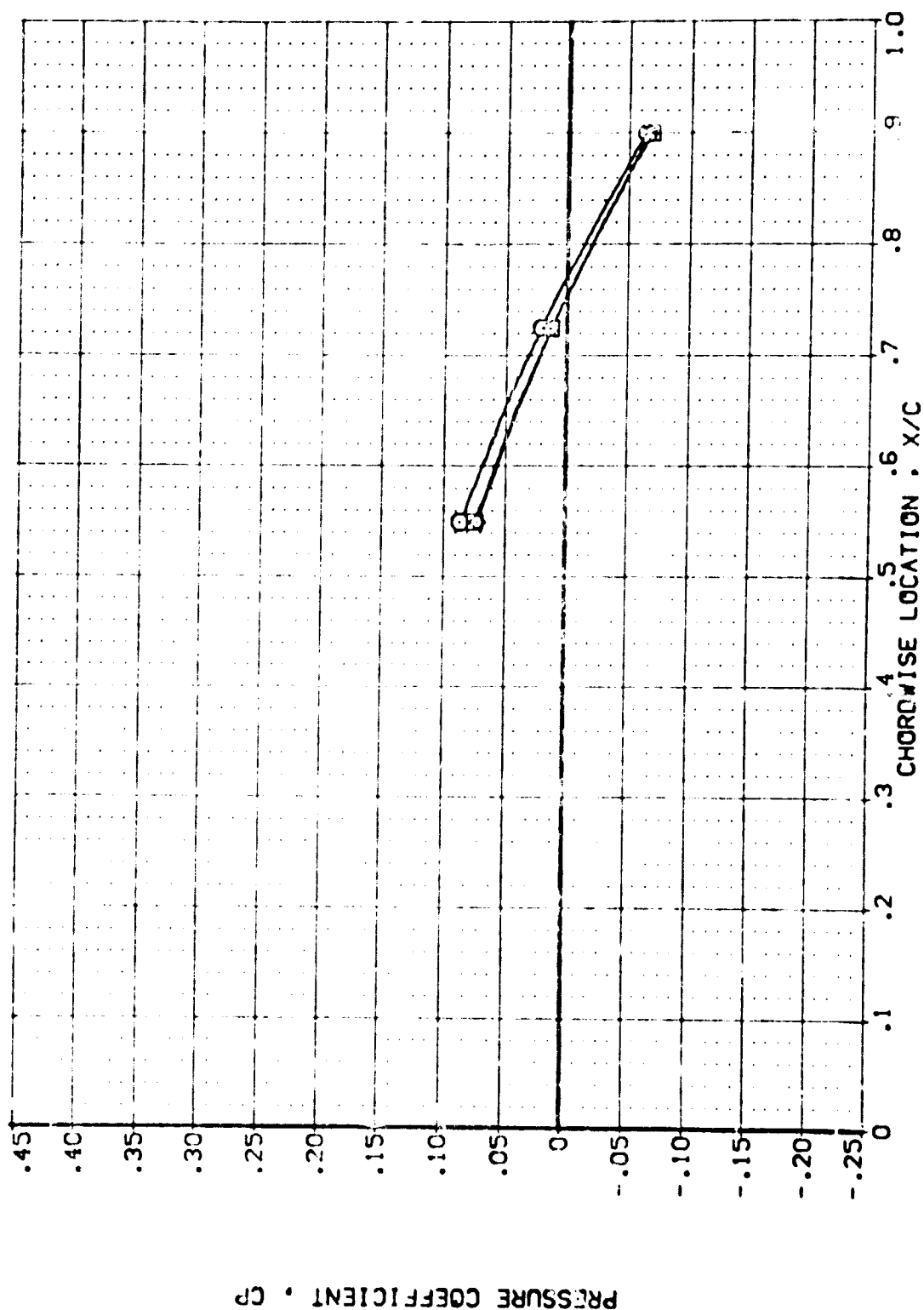


ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (1.6.70.93) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (1.6.70.93) AYES 87-710 1A12C 03 T1 S1 LOWER WING PRESSURE
 (1.6.70.93) AYES 87-710 1A12C 04 T1 S1 LOWER WING PRESSURE

POWER UFR SUPR 01-M-DAL
 .070 26.860 1.000
 1.000 26.860 1.000
 1.000 26.860 1.000

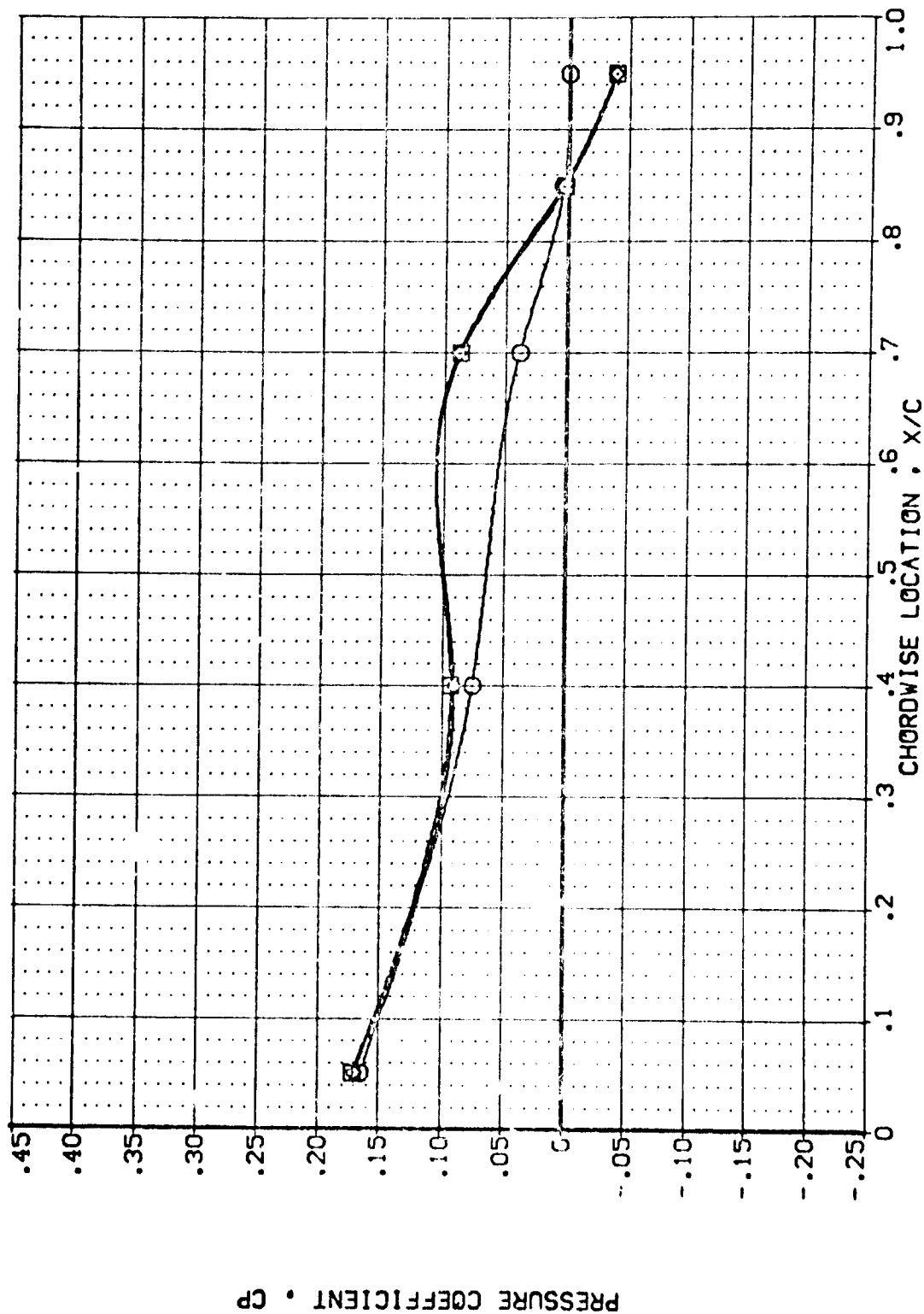


ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LB2038) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
 (LB2079) AMES 87-710 IAI2C 03 T1 S1 LOWER WING PRESSURE
 (LB2086) AMES 87-710 IAI2C 04 T1 S1 LOWER WING PRESSURE

POWER C/D S/P/R G/M/B/L
 .000 26.890 .768 1.000
 1.000 26.360 .768 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

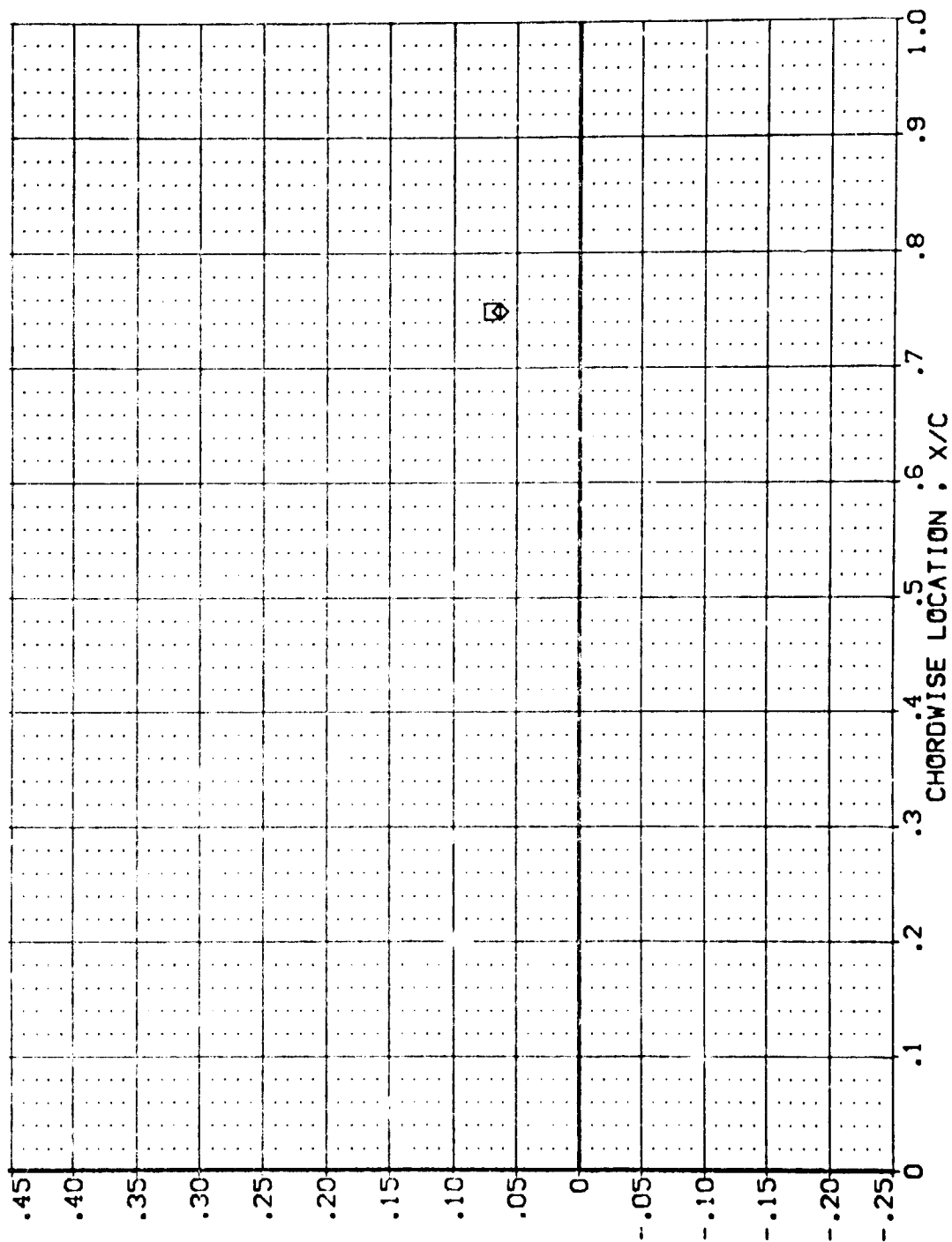
MACH = 3.000 ALPHA = 8.000 Y/B = .673

DATA SET SY: 60L CONFIGURATION DESCRIPTION

(LB:008)
(LB:079)
(LB:083)

AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 1A12C 03 T1 S1 LOWER WING PRESSURE
AMES 87-710 1A12C 04 T1 S1 LOWER WING PRESSURE

POWER 0.000 26.860
1.000 26.860
GIMBAL 1.000 .768
1.000 .768



PRESSURE COEFFICIENT, CP

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

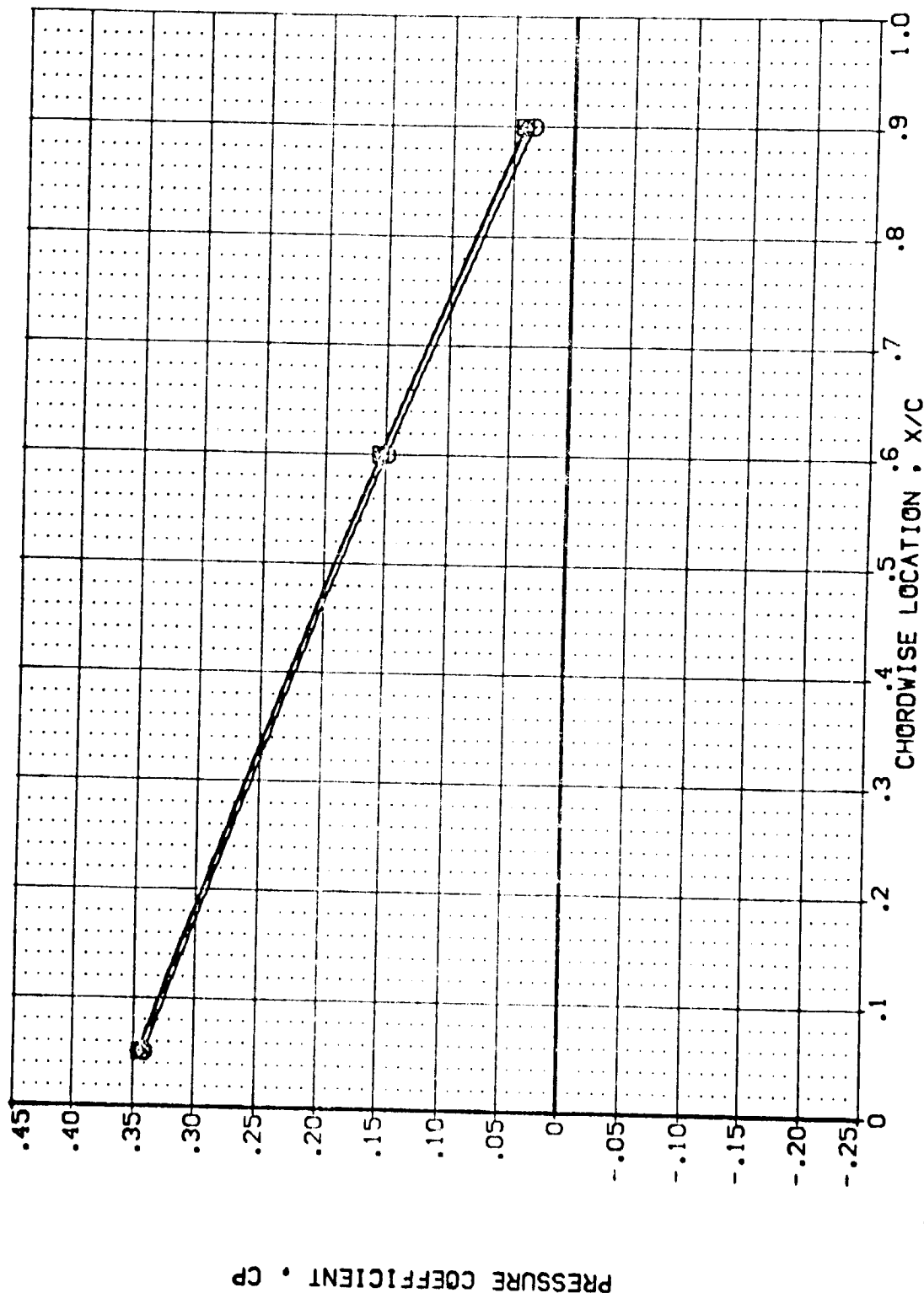
MACH = 3.000 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB0038)
(LB0073)
(LB0083)

AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 03 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 04 T1 S1 LOWER WING PRESSURE

POWER DFR SRPR GIMBAL
1.000 26.860 .768 1.000
1.000 26.860 .768 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM
MACH = 3.000 ALPHA = 8.000 Y/B = .887

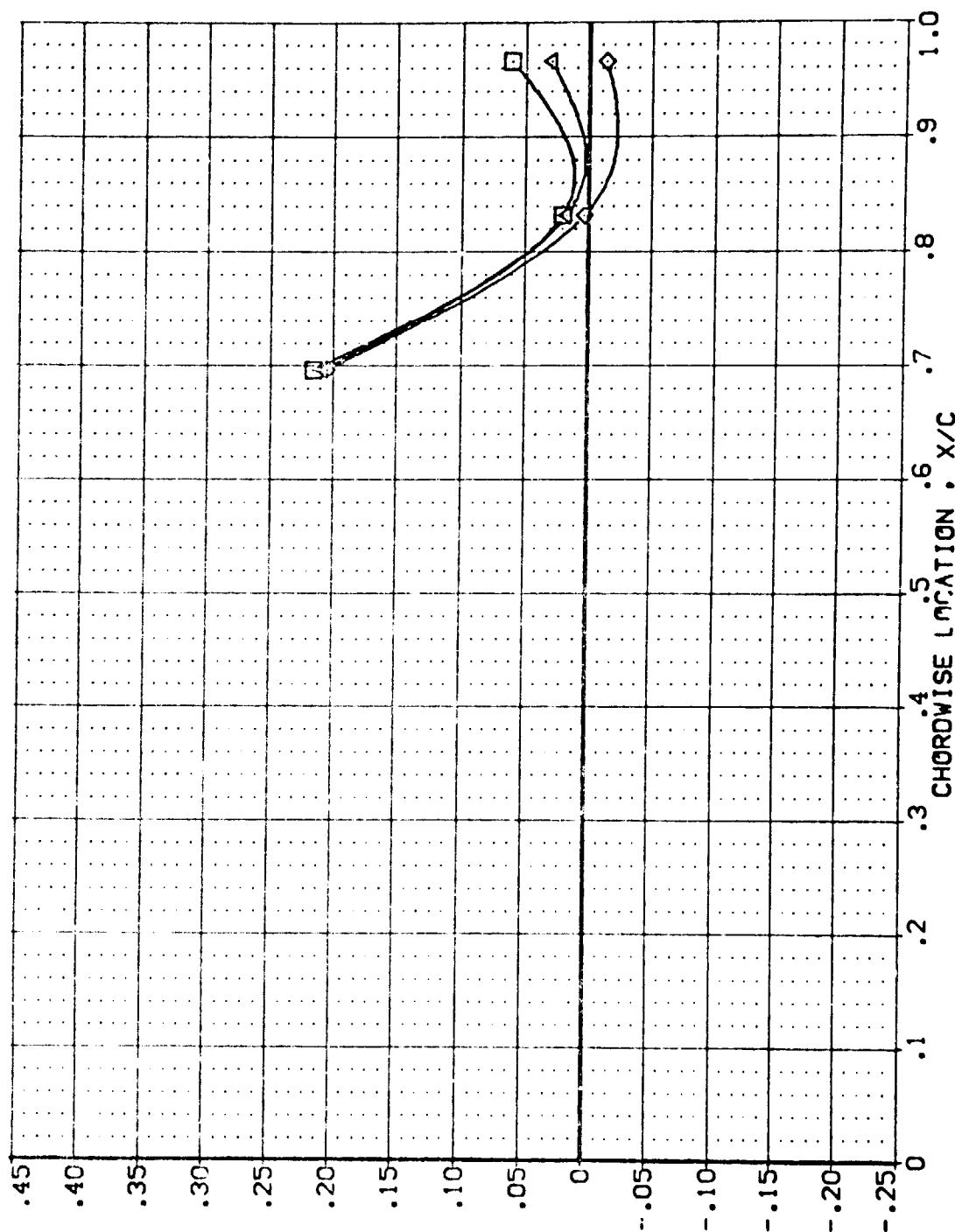
DATA SET SYMBOL

(LB7046)
(LB7030)
(LB7031)
(LB7034)

CONFIGURATION DESCRIPTION
AMES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE
AMES 87-710 [A12C 03 T1 S1] LOWER WING PRESSURE
AMES 87-710 [A12C 03 T1 S1] LOWER WING PRESSURE
AMES 87-710 [A12C 04 T1 S1] LOWER WING PRESSURE

POWER QFR CREF GINBAL
.000 23.850 1.000
1.000 23.850 1.000
2.000 23.850 1.000
1.000 23.850 1.000

PRESSURE COEFFICIENT, CP



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ046)
(LBZ000)
(LBZ081)
(LBZ084)

AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 T1 S1
IA12C 03 T1 S1
IA12C 04 T1 S1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

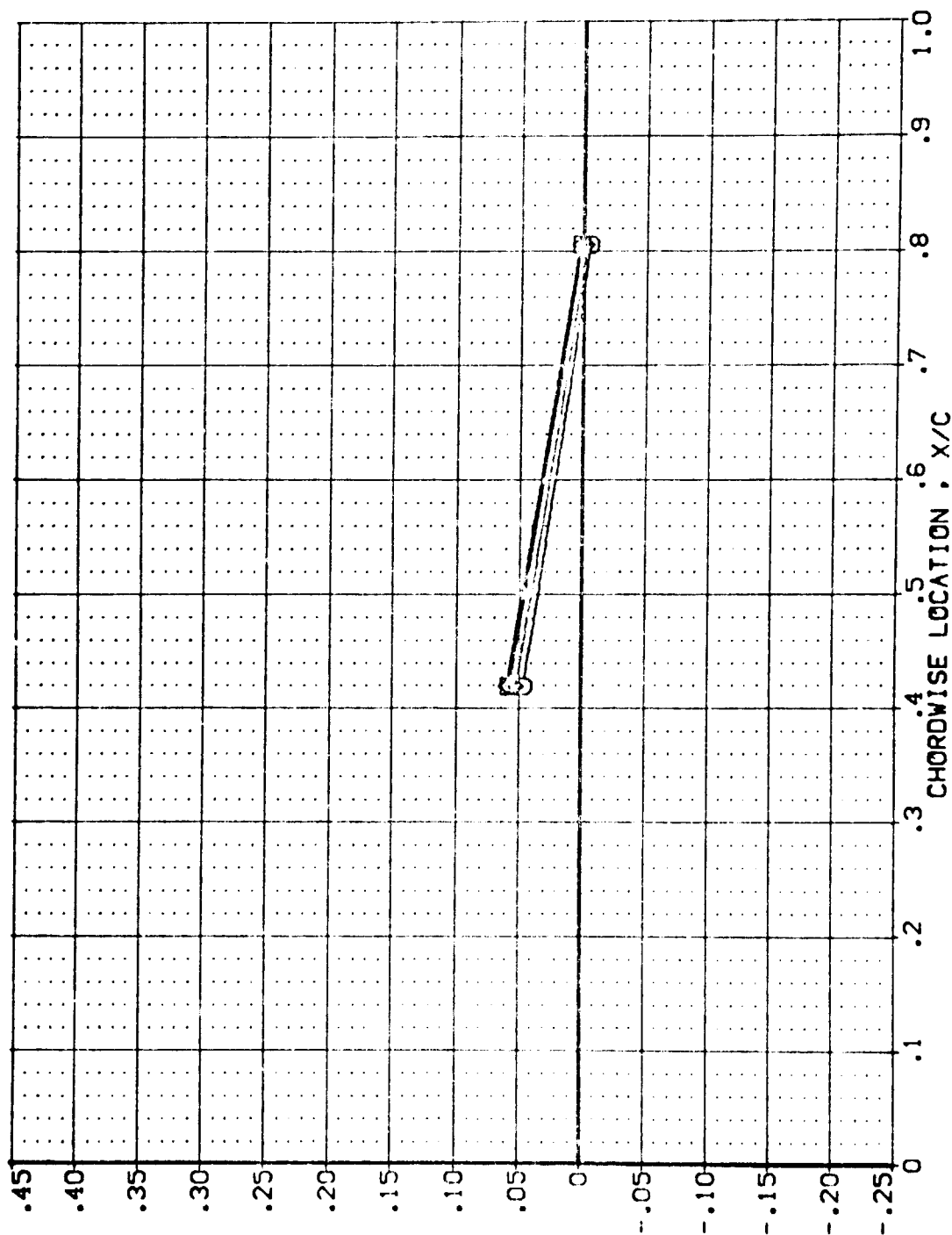
POWER 0.000
1.000
2.000
1.000

GPR 23.060
23.060

SRPR .825
.825

GIMBAL 1.000
1.000
1.000

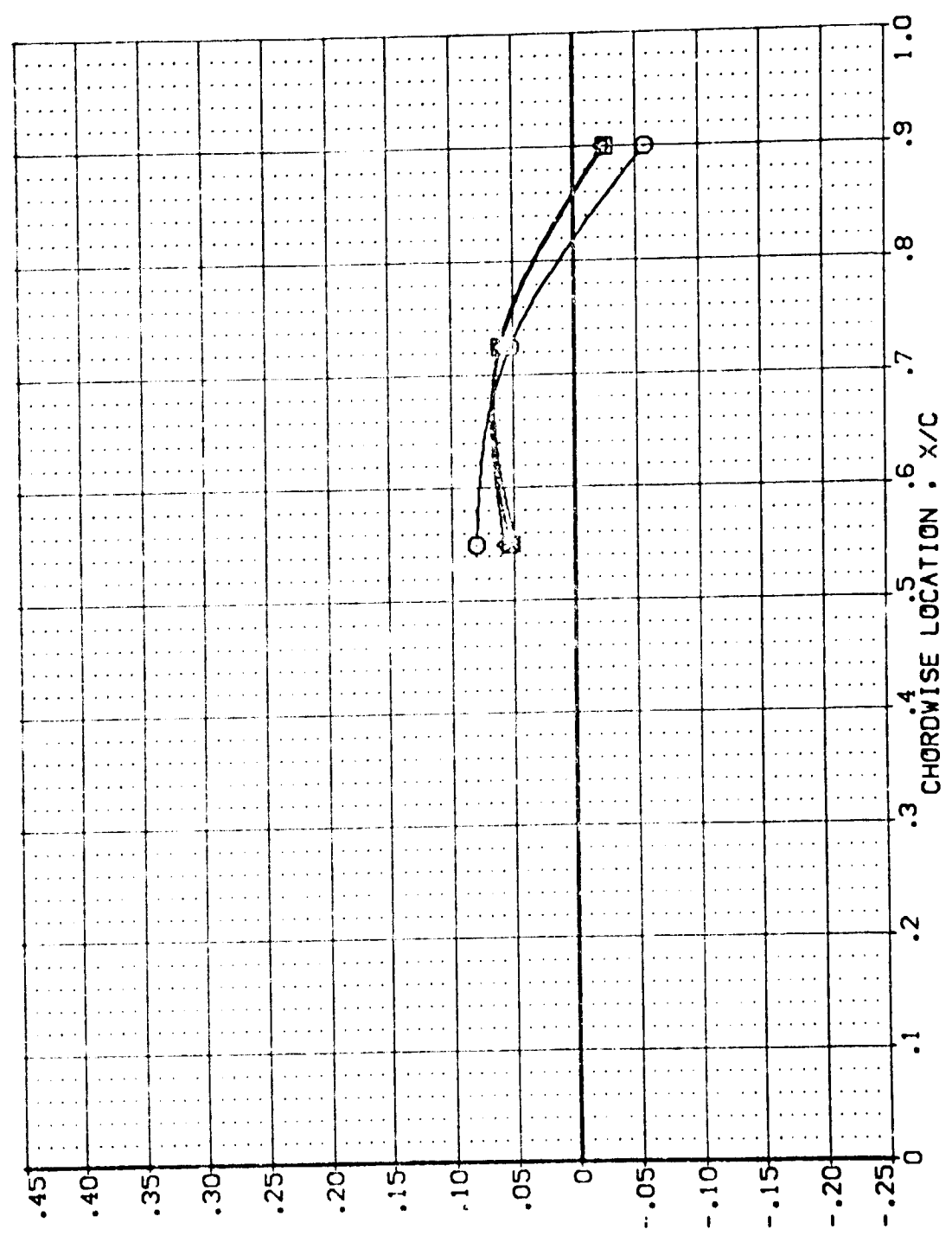
PRESSURE COEFFICIENT, CP



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	QPR	SMFR	GINBAL
(L02003)	AWES 87-710 [A12C 01 T1 S1]	1.000	23.860	.826	1.000
(L02004)	AWES 87-710 [A12C 03 T1 S1]	1.000	23.860	.826	1.000
(L02005)	AWES 87-710 [A12C 03 T1 S1]	1.000	23.860	.826	1.000
(L02006)	AWES 87-710 [A12C 04 T1 S1]	1.000	23.860	.826	1.000

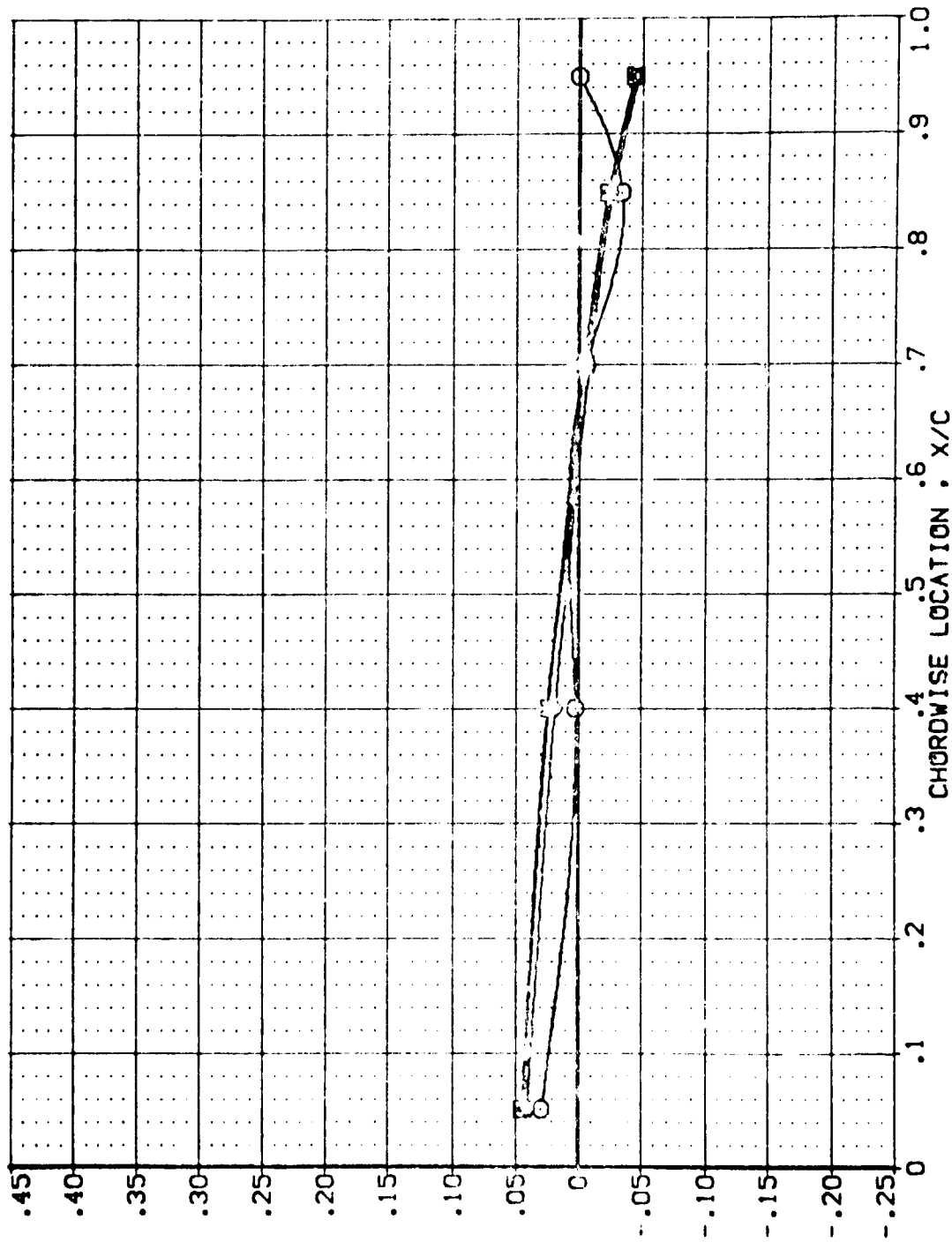


PRESSURE COEFFICIENT • CP

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZD46) C AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE POWER QPR SQRPR GIMBAL
 (LBZD80) X AVES 87-710 1A12C 03 T1 S1 LOWER WING PRESSURE 1.000 23.850 .826 1.000
 (LBZD81) X AVES 87-710 1A12C 03 T1 S1 LOWER WING PRESSURE 2.000 23.850 .826 1.000
 (LBZD84) X AVES 87-710 1A12C 04 T1 S1 LOWER WING PRESSURE 1.000 23.850 .826 1.000



PRESSURE COEFFICIENT • CP

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LPT04S)
(LPT030)
(LPT031)
(LPT034)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

AI2C 01 T
AI2C 03 T
AI2C 03 T
AI2C 04 T

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

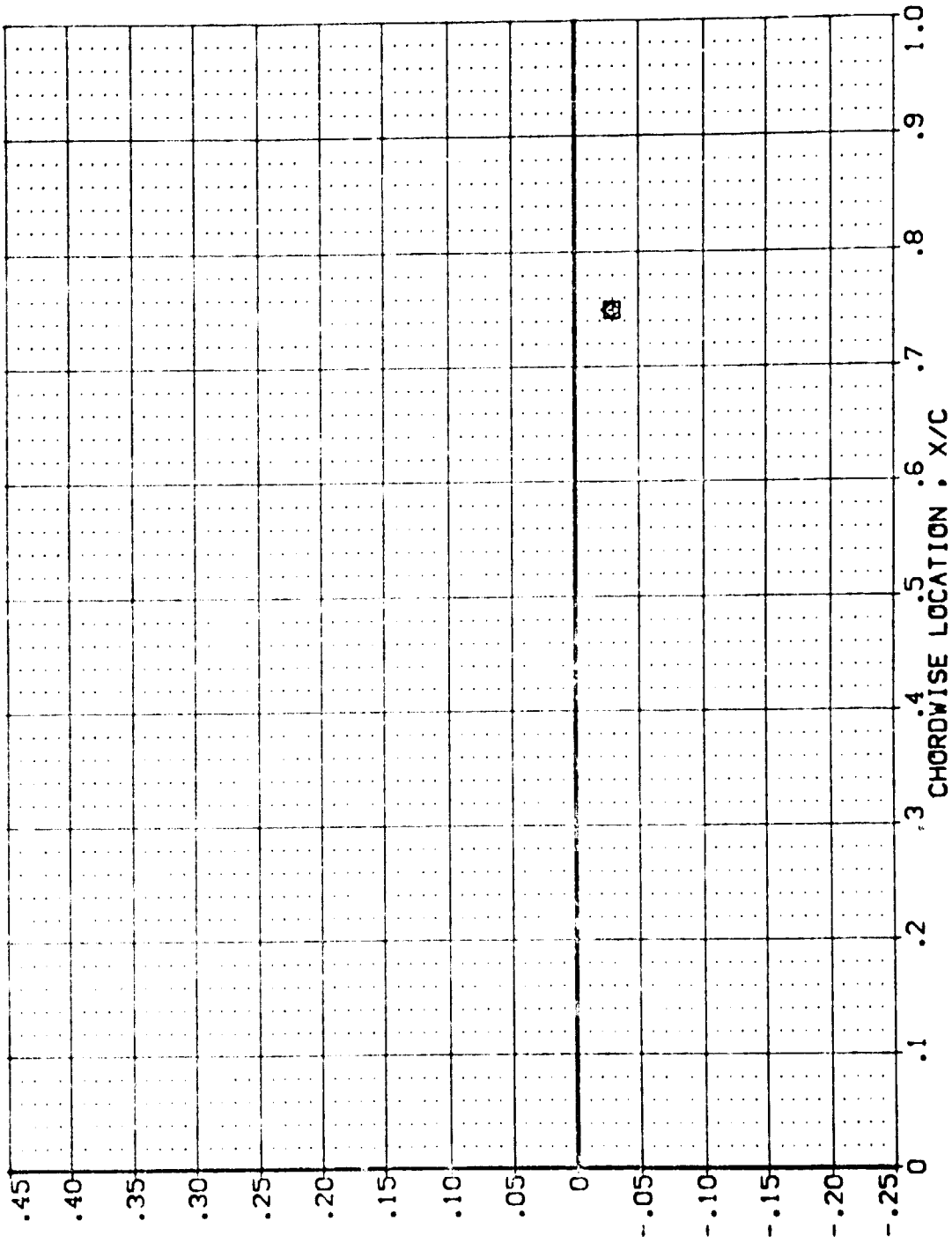
POWER
1.000
1.000
2.000
1.000

G-R
23.860
23.860
23.860
23.860

SC-PR
.876
.876
.876
.876

GIMBAL
1.000
1.000
1.000
1.000

PRESSURE COEFFICIENT • CP



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .780

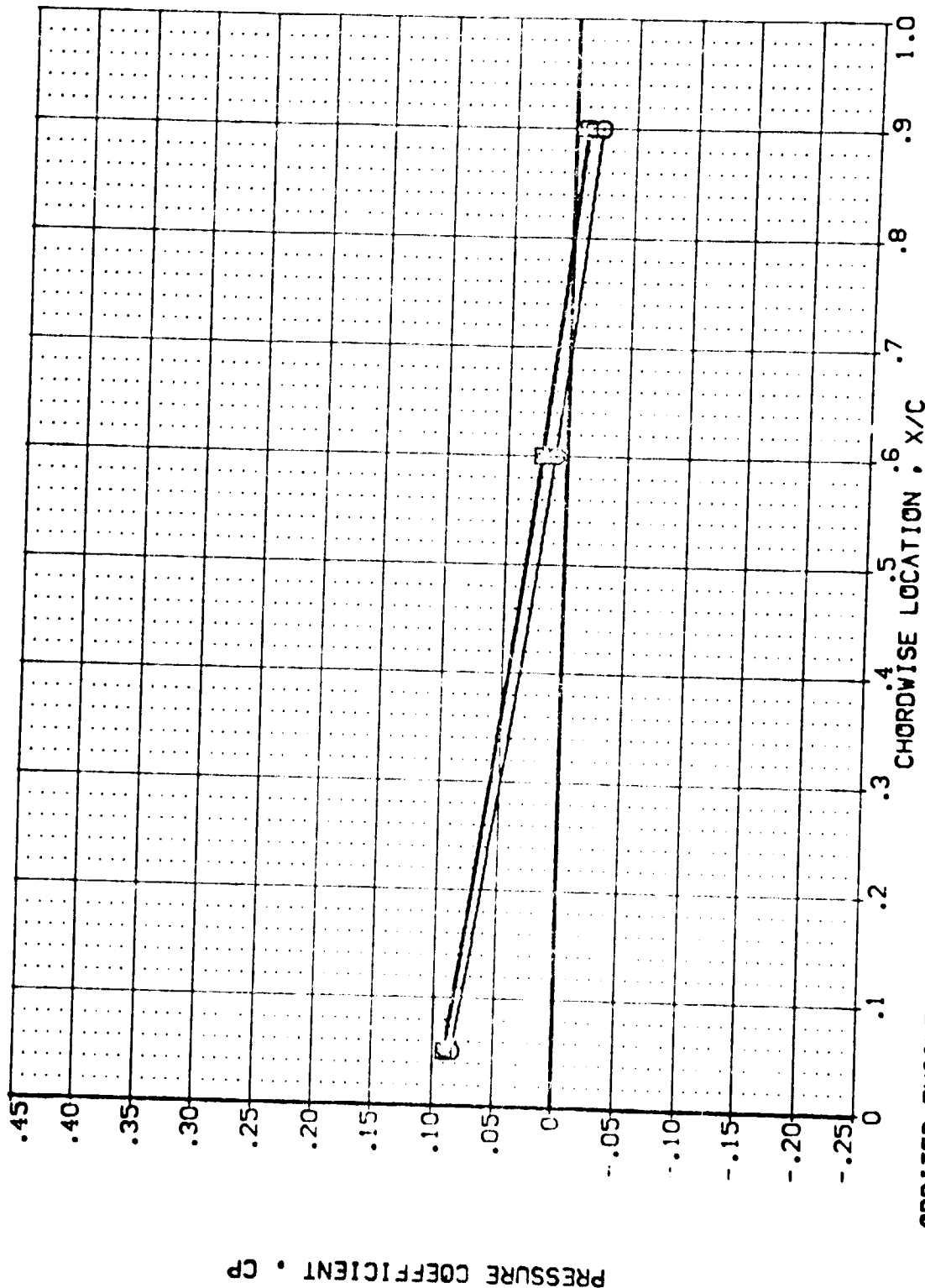
DATA SET SYMBOL

(LB2046)
(LB2080)
(LB2081)
(LB2084)

CONFIGURATION DESCRIPTION

AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 03 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 04 T1 S1 LOWER WING PRESSURE

POWER DFR SFRP GIMBAL
1.000 23.860 .826 1.000
2.000 23.860 .826 1.000
1.000 23.860 .826 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

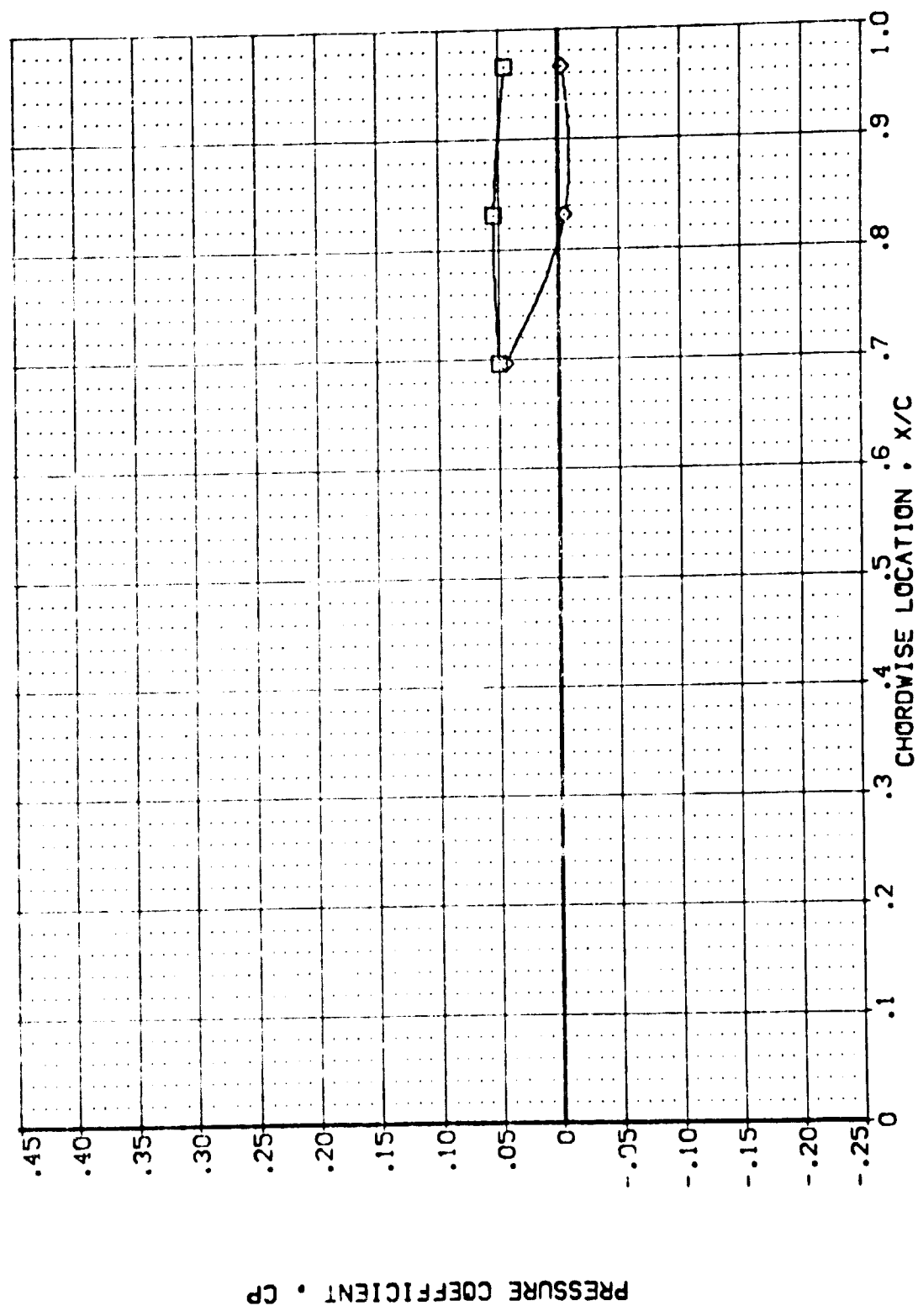
MACH = 3.500 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

Q	AVES 87-710	AI2C 01 T	SI	LOWER WING PRESSURE
X	AVES 87-710	AI2C 03 T	SI	LOWER WING PRESSURE
X	AVES 87-710	AI2C 04 T	SI	LOWER WING PRESSURE

POWER QFR SFRP GIMBAL

.000	23.860	.826	1.000
1.000	23.860	.826	1.000
2.000	23.860	.826	1.000
1.000	23.860	.826	1.000



PRESSURE COEFFICIENT • CP

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .299 PAGE 169

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZD46)
(LBZD80)
(LBZC31)
(LBZD94)

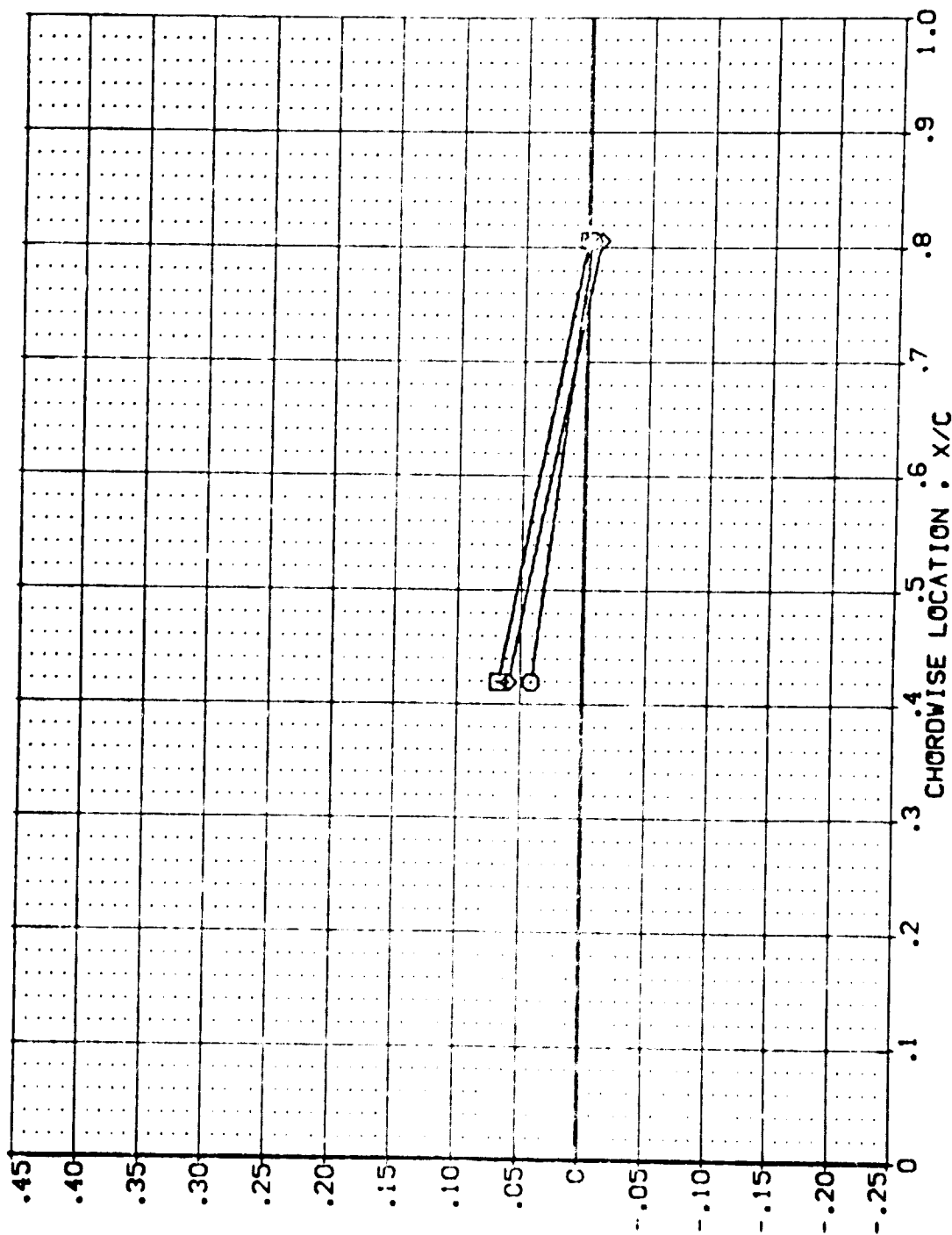
AVES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IALZC 03 T1 S1 LOWER WING PRESSURE
AVES 87-710 IALZC 03 T1 S1 LOWER WING PRESSURE
AVES 87-710 IALZC 04 T1 S1 LOWER WING PRESSURE

POWER 0.000
1.000
2.000
1.000

Q/R 23.860
23.860

SR/PR 0.826
0.826

GI/BAL 1.000
1.000
1.000
1.000



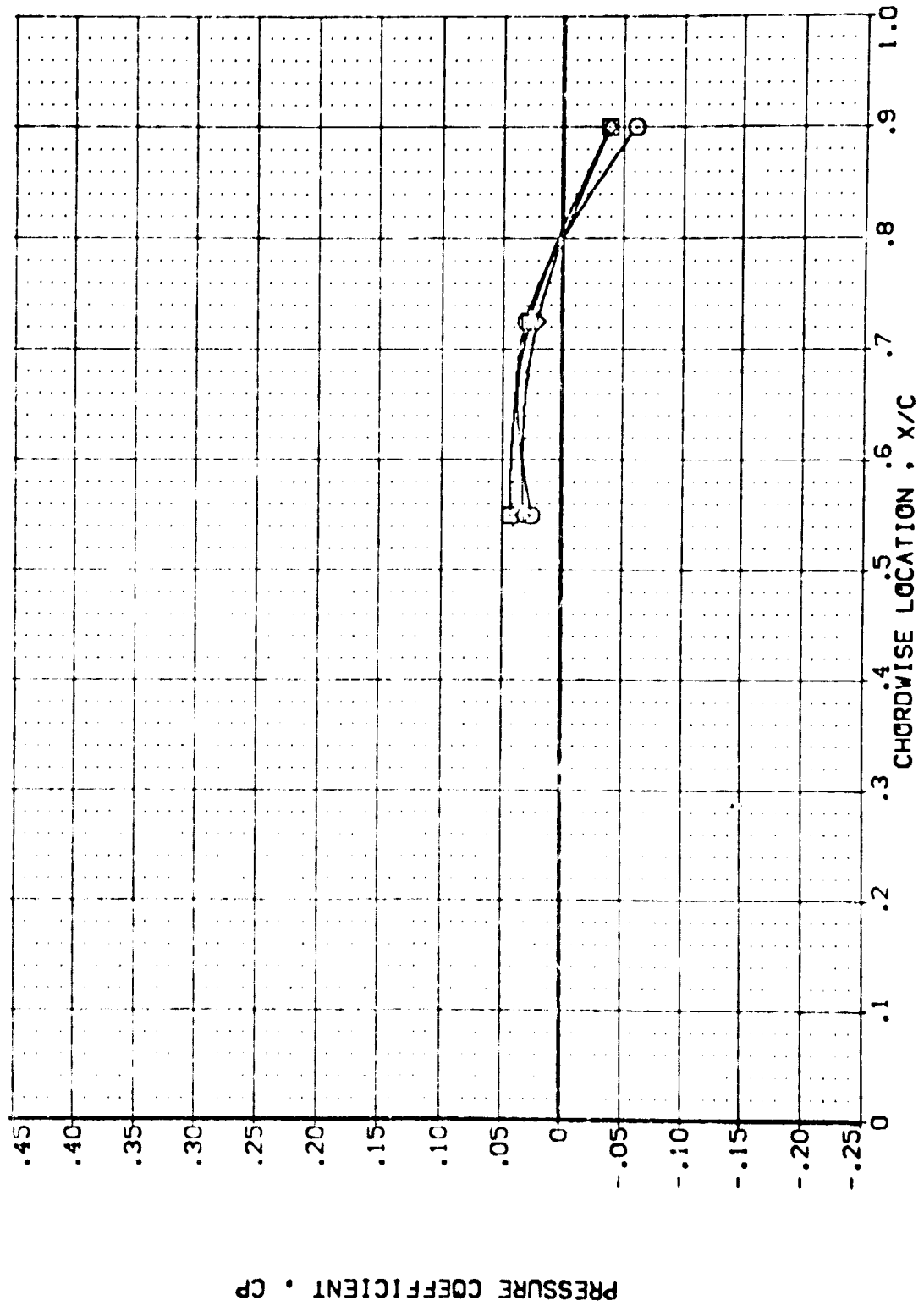
PRESSURE COEFFICIENT, CP

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .427

DATA SET 50001 CONFIGURATION DESCRIPTION

AMES 87-710	LA12C	01	11	SI	LOWER WING PRESSURE	POW/ER	OPR	SR/PR	GINBAL
AMES 87-710	LA12C	03	11	SI	LOWER WING PRESSURE	1.000	23.860	.826	1.000
AMES 87-710	LA12C	03	11	SI	LOWER WING PRESSURE	1.000		.826	1.000
AMES 87-710	LA12C	04	11	SI	LOWER WING PRESSURE	1.000	23.860	.826	1.000



PRESSURE COEFFICIENT, CP

ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL

(LB7046)
(LB7030)
(LB7081)
(LB7084)

CONFIGURATION DESCRIPTION

AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 IAI2C 03 T1 S1 LOWER WING PRESSURE
AMES 87-710 IAI2C 04 T1 S1 LOWER WING PRESSURE

POWER

000
100
2.000
1.000

Q-R

23.860
23.860

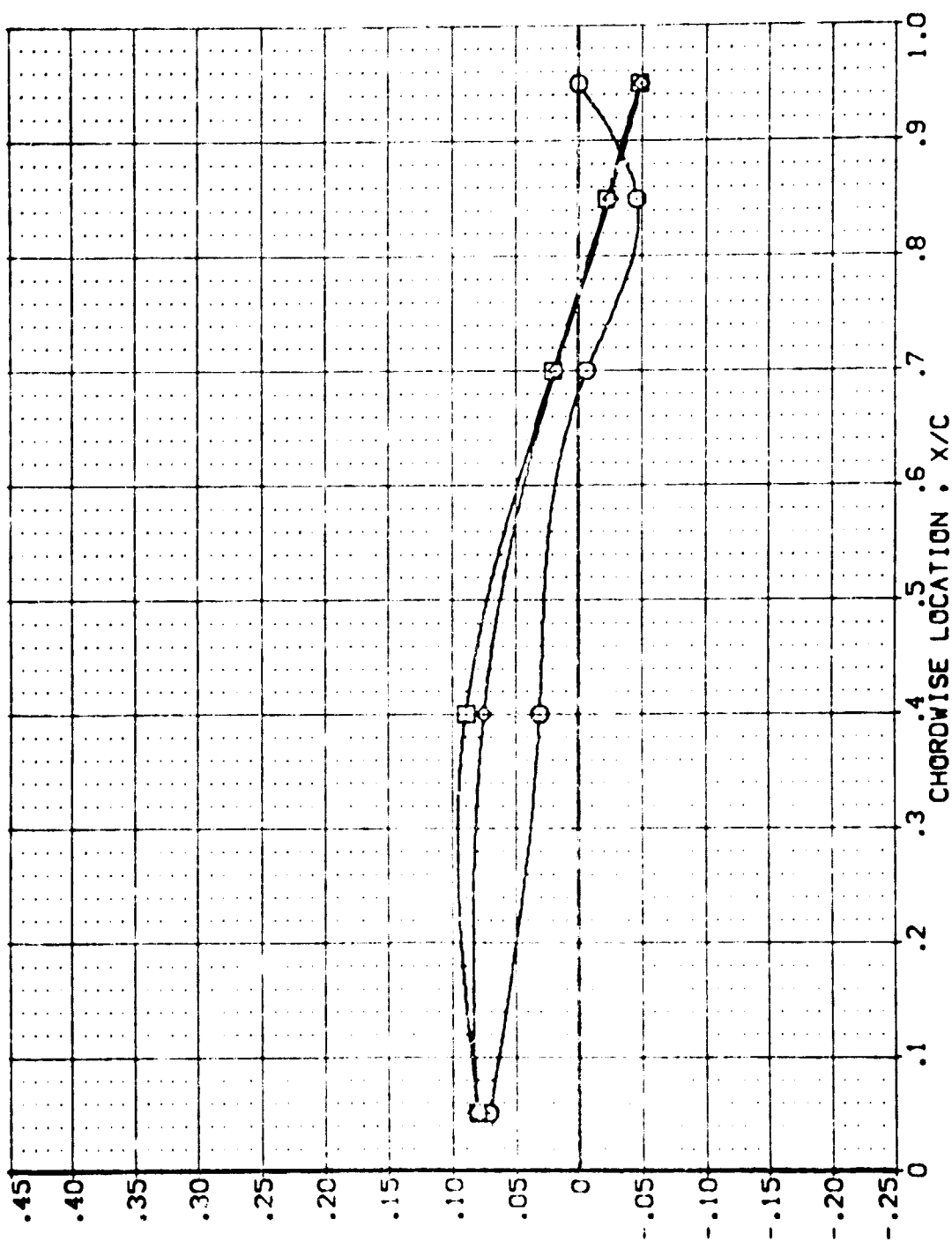
SR-PR

.826
.826

GIN-VAL

1.000
1.000
1.000

PRESSURE COEFFICIENT, CP

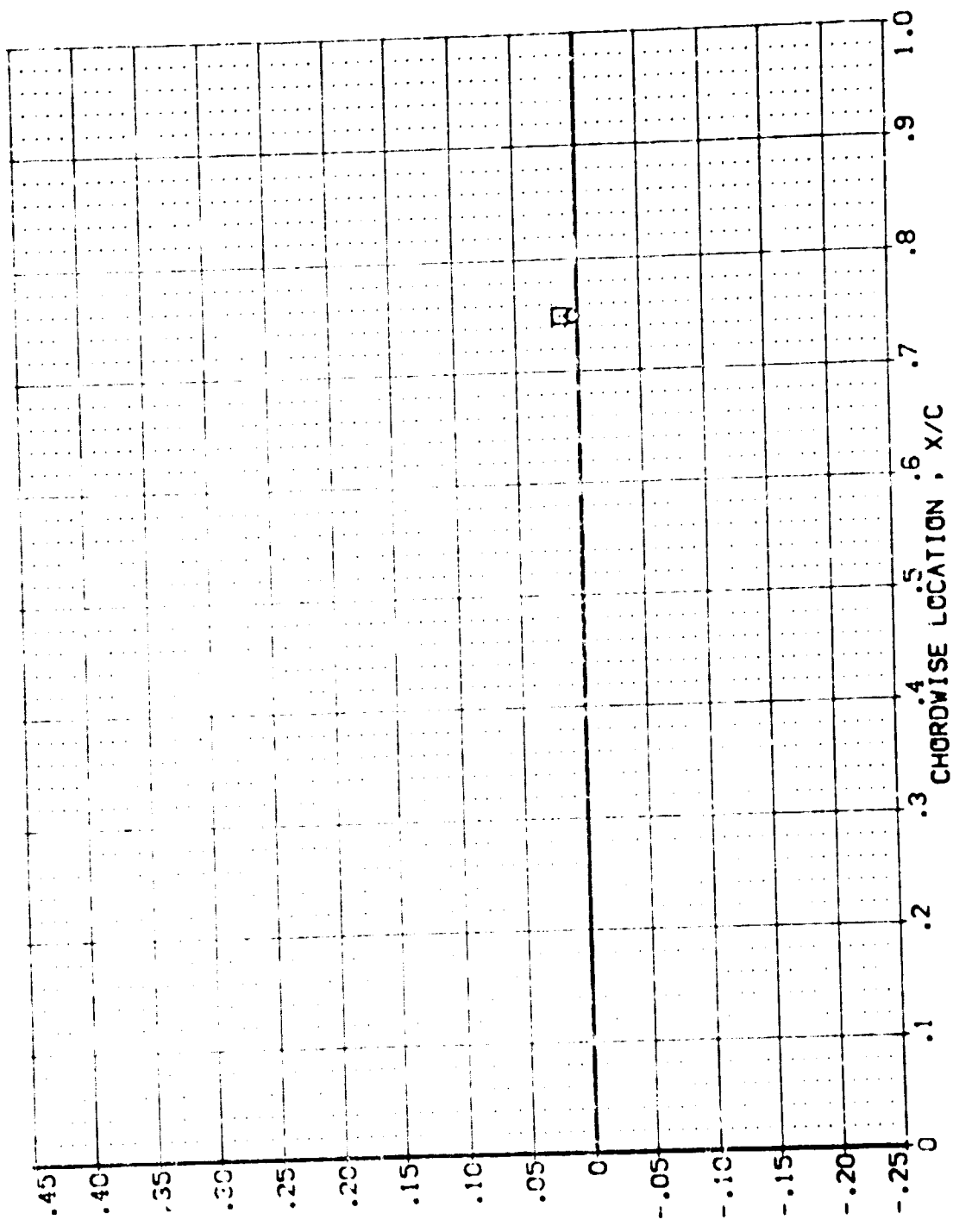


ORBITER ENGINE OUT EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .673

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	Q-R	SEPR	GL-BAL
(LB7045)	AMES 87-710 [A] [C] [1] [S]	.000			1.000
(LB7046)	AMES 87-710 [A] [C] [3] [S]	1.000	23.800	.878	1.000
(LB7047)	AMES 87-710 [A] [C] [3] [S]	2.000		.878	1.000
(LB7048)	AMES 87-710 [A] [C] [4] [S]	1.000	23.800	.878	1.000

PRESSURE COEFFICIENT • CP



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

DATA SET SYMBOL

LBZ045
LBZ060
LBZ081
LBZ084

CONFIGURATION DESCRIPTION

AVES 87-710
AVES 87-710
AVES 87-710

POWER

0.000
1.000
2.000

CPR

23.860
23.860

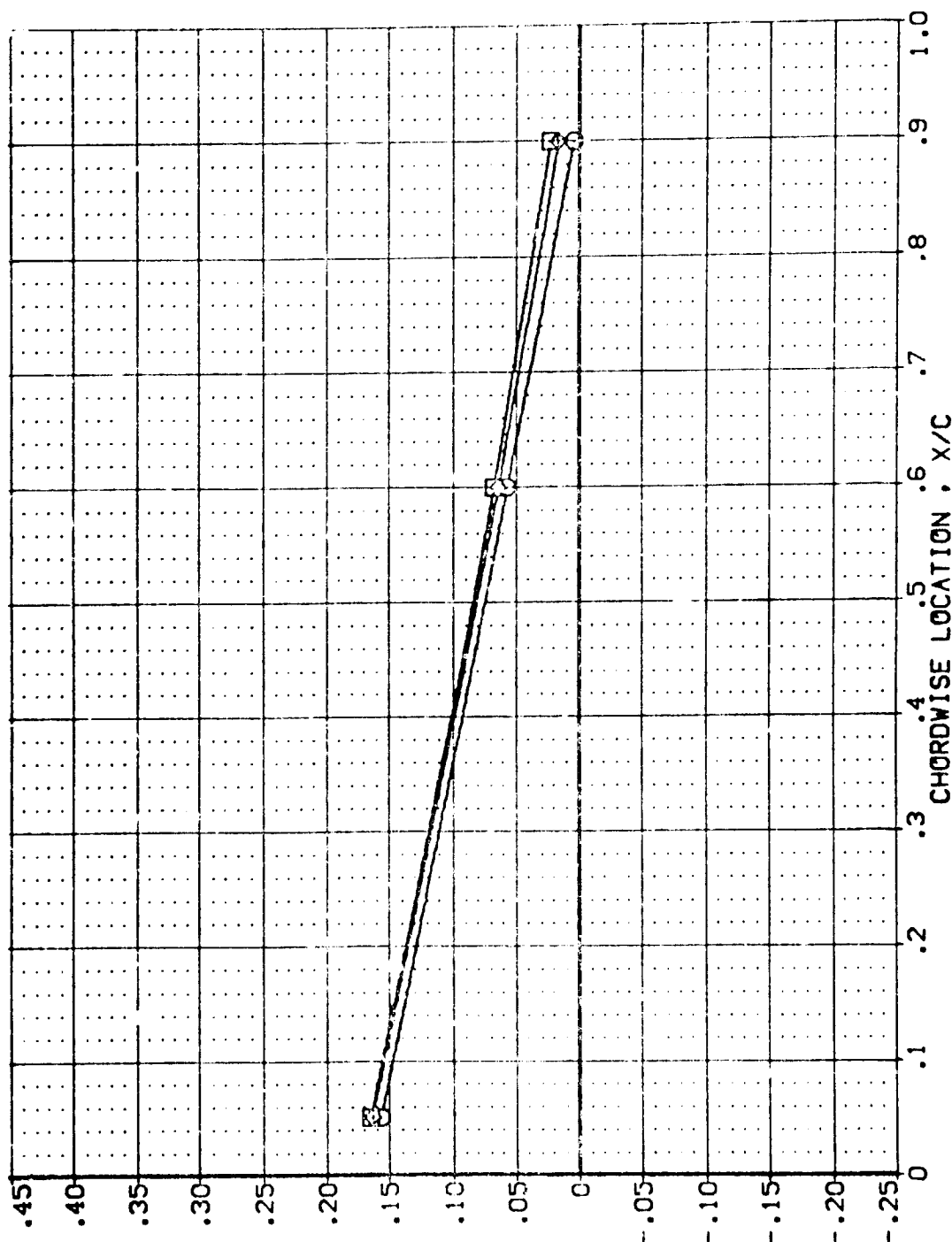
SWPR

.826
.826

G/REAL

1.000
1.000
1.000

PRESSURE COEFFICIENT, CP

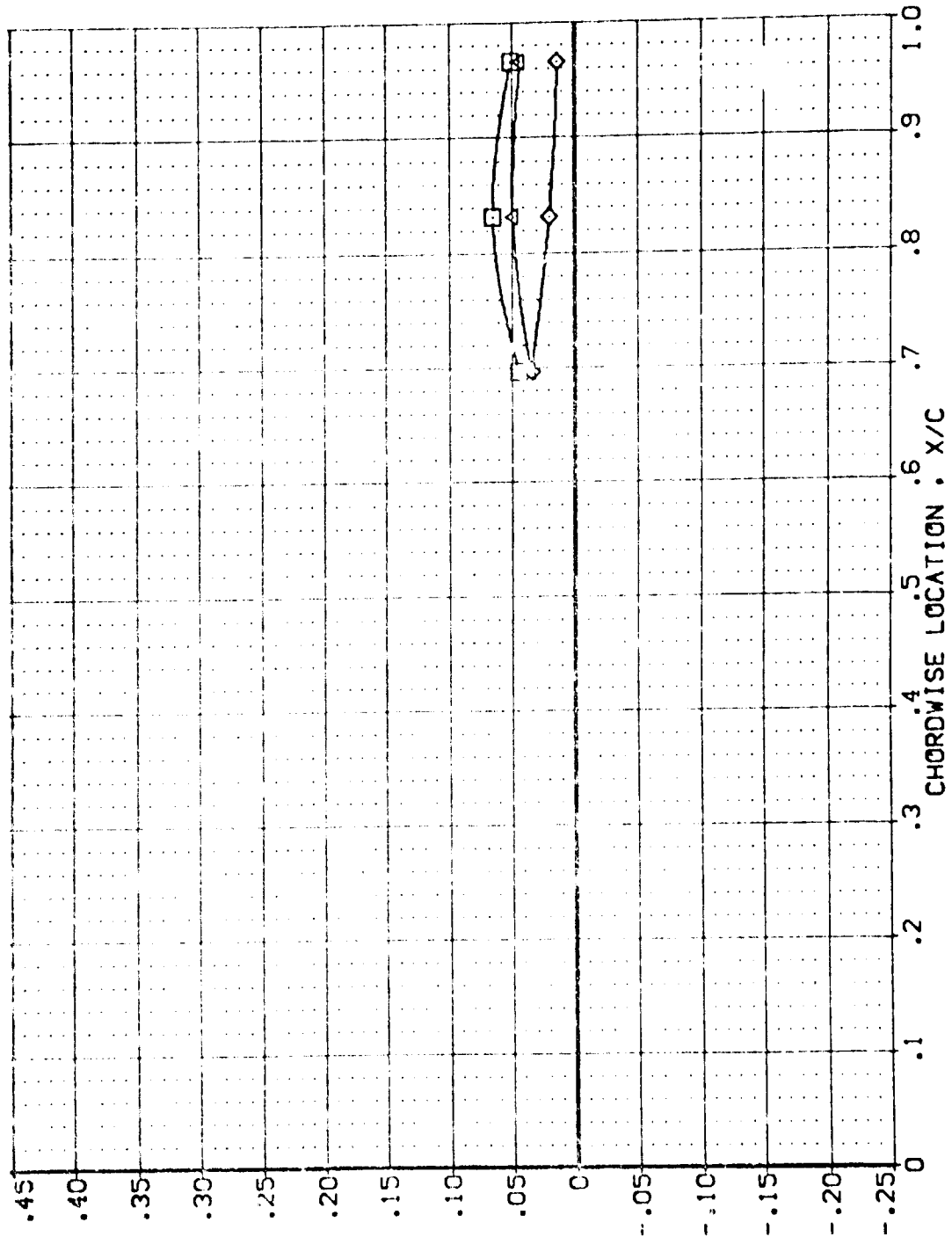


ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .887

PAGE 174

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	Q-R	SP-R	Q1-BAL
AVES 87-710	A12C 91 T1 S1	1.000	20.950	.826	1.000
AVES 87-710	A12C 93 T1 S1	1.000	20.950	.826	1.000
AVES 87-710	A12C 93 T1 S1	2.000	20.950	.826	1.000
AVES 87-710	A12C 93 T1 S1	1.000	20.950	.826	1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

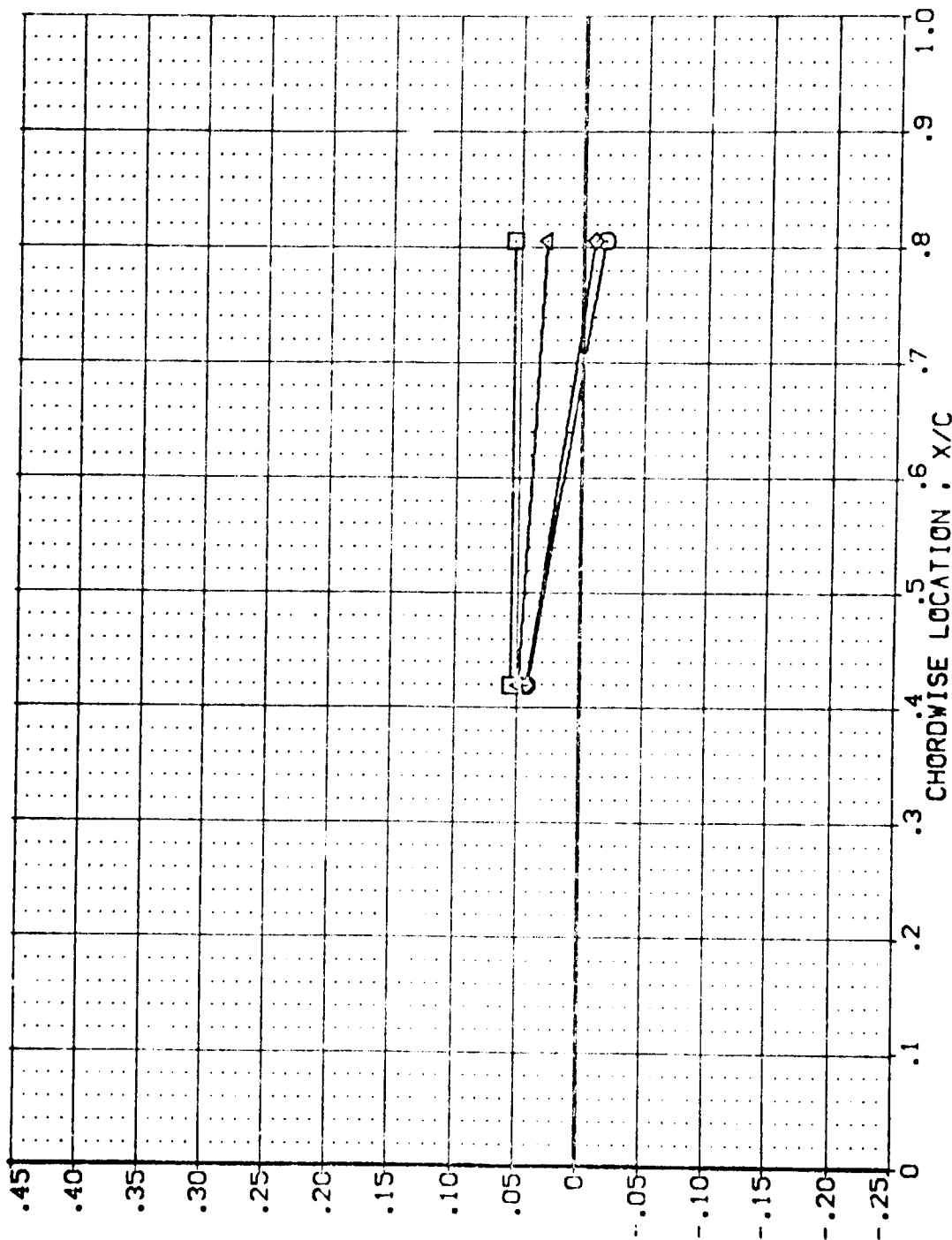
(LBZD46)
(LBZD80)
(LBZD81)
(LBZD84)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 TI SI
IA12C 03 TI SI
IA12C 03 TI SI
IA12C 04 TI SI

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER C/R S/R PR G/HBAL
1.000 23.860 .826 1.000
2.000 23.860 .826 1.000
1.000 23.860 .826 1.000



PRESSURE COEFFICIENT, CP

CHORDWISE LOCATION, X/C

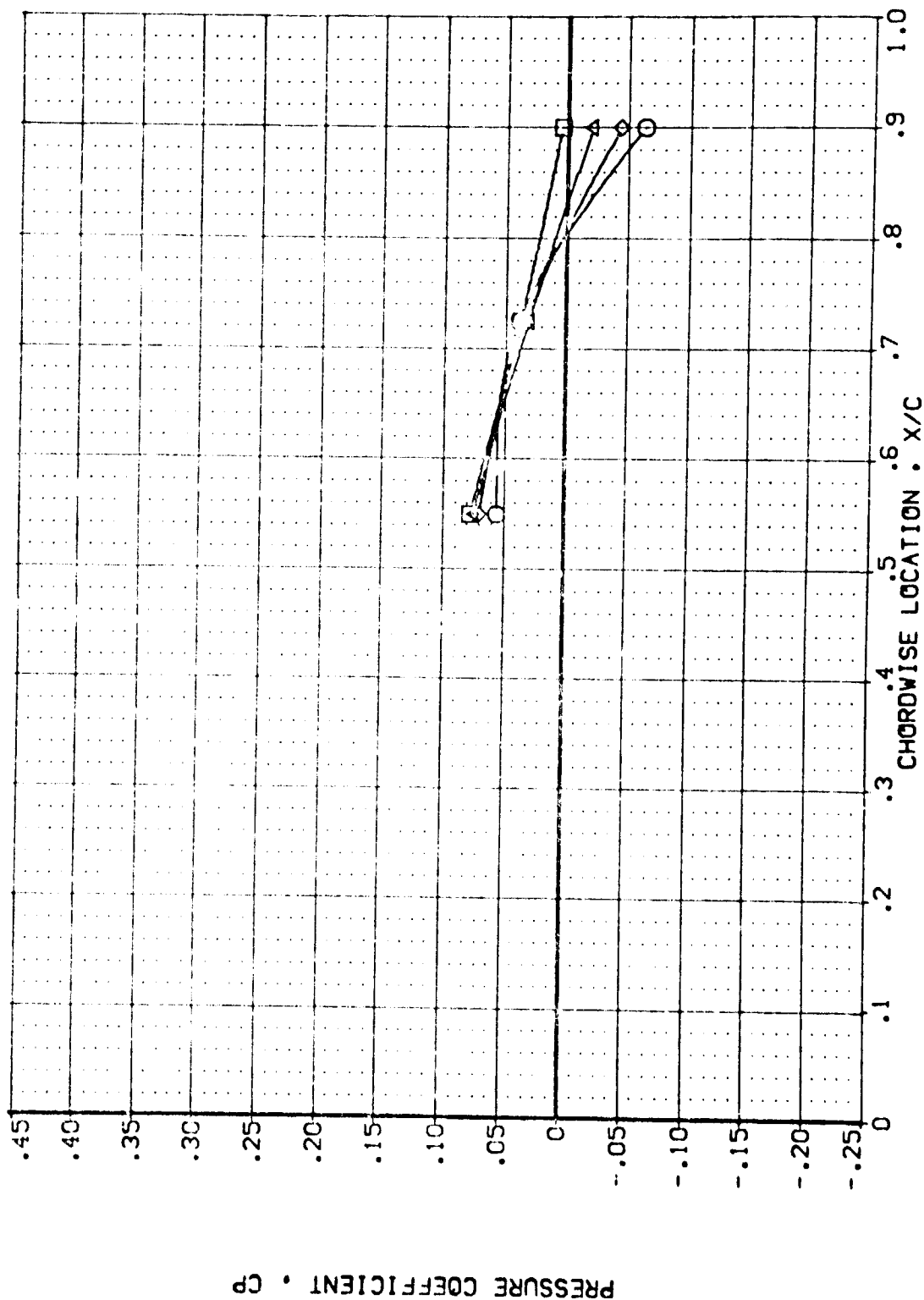
ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .427

DATA SET 5: 80L
 (L5/245)
 (L5/300)
 (L5/381)
 (L5/3004)

CONFIGURATION DESCRIPTION
 AYES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE
 AYES 87-710 IALZC 03 T1 S1 LOWER WING PRESSURE
 AYES 87-710 IALZC 03 T1 S1 LOWER WING PRESSURE
 AYES 87-710 IALZC 04 T1 S1 LOWER WING PRESSURE

POWER GPR SRPR GIMBAL
 .000 23.650 .876 1.000
 1.000 23.650 .876 1.000
 2.000 23.650 .876 1.000
 1.000 23.650 .876 1.000

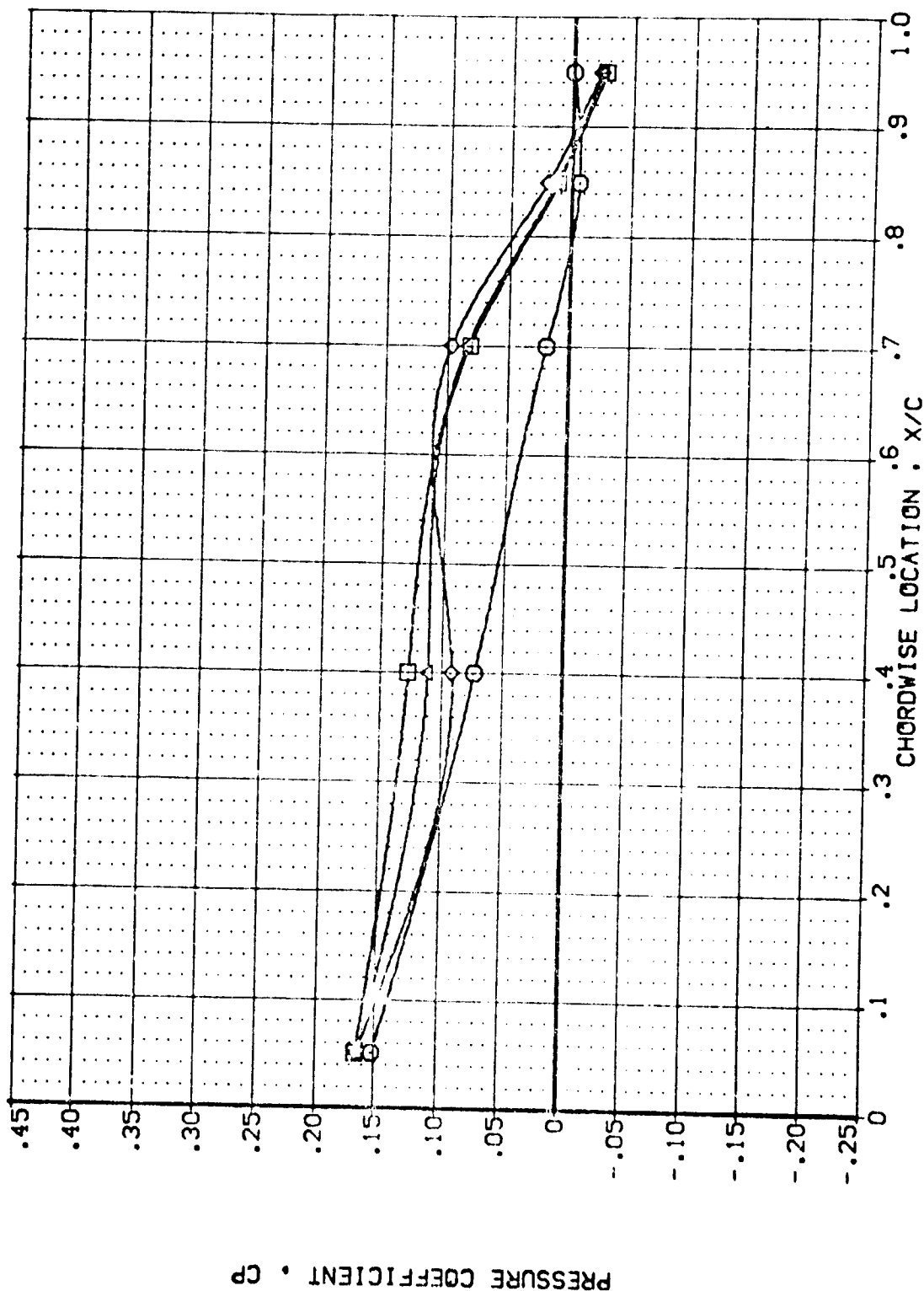


ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ046)	AMES 87-710	IA12C 01	TI	SI	LOWER WING PRESSURE	POWER	0-R	SR-PR	GIMBAL
(LBZ030)	AMES 87-710	IA12C 03	TI	SI	LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LBZ031)	AMES 87-710	IA12C 03	TI	SI	LOWER WING PRESSURE	2.000	23.860	.826	1.000
(LBZ084)	AMES 87-710	IA12C 04	TI	SI	LOWER WING PRESSURE	1.000	23.860	.826	1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .673

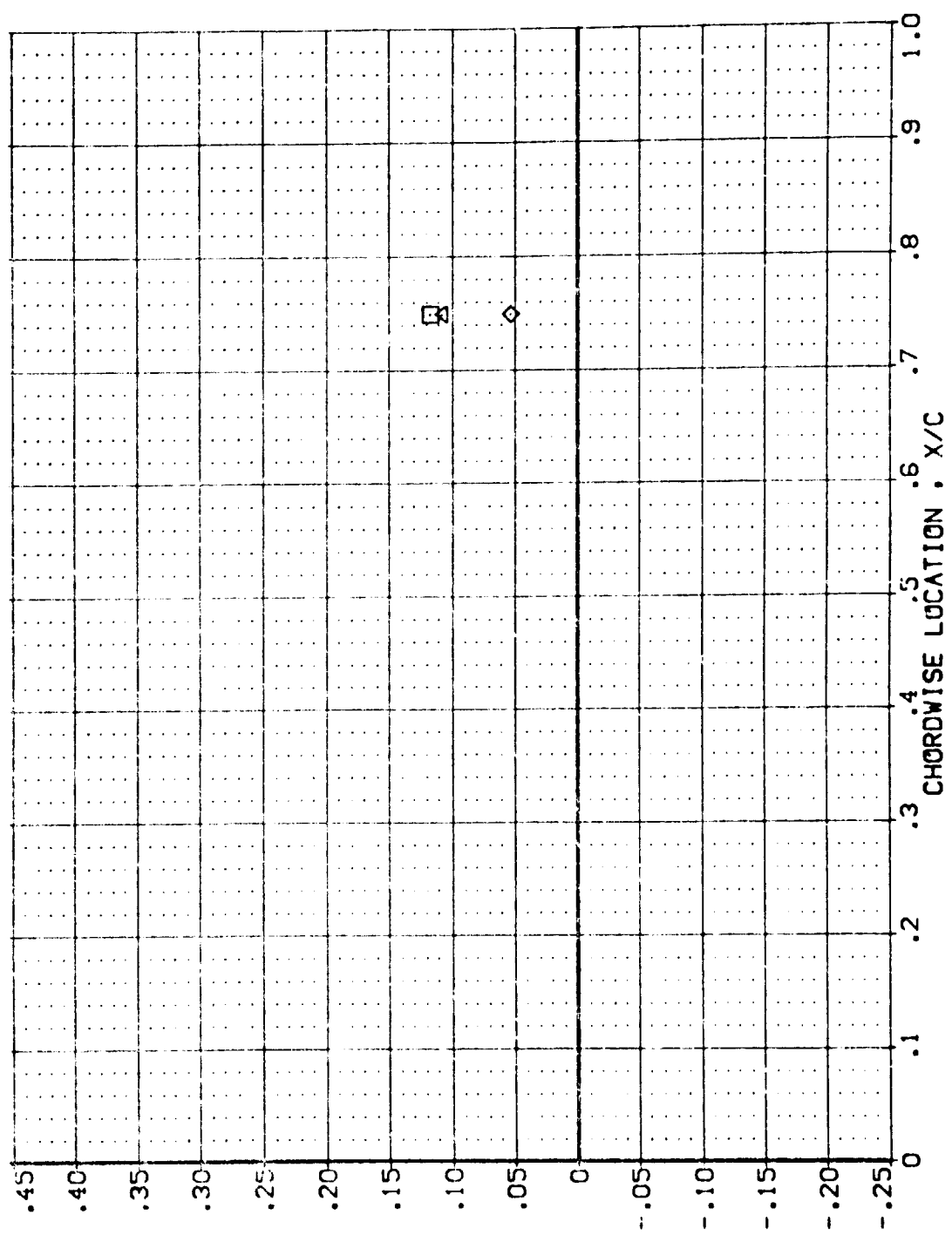
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/C/P GIMBAL

(LB2046) AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 23.860 .826 1.000

(LB2047) AMES 87-710 1A12C 03 T1 S1 LOWER WING PRESSURE 1.000 23.860 .826 1.000

(LB2048) AMES 87-710 1A12C 03 T1 S1 LOWER WING PRESSURE 2.000 23.860 .826 1.000

(LB2049) AMES 87-710 1A12C 04 T1 S1 LOWER WING PRESSURE 1.000 23.860 .826 1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

DATA SET SYMBOL
(LBZ046)
(LBZ000)
(LBZ001)
(LBZ004)

CONFIGURATION DESCRIPTION
AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

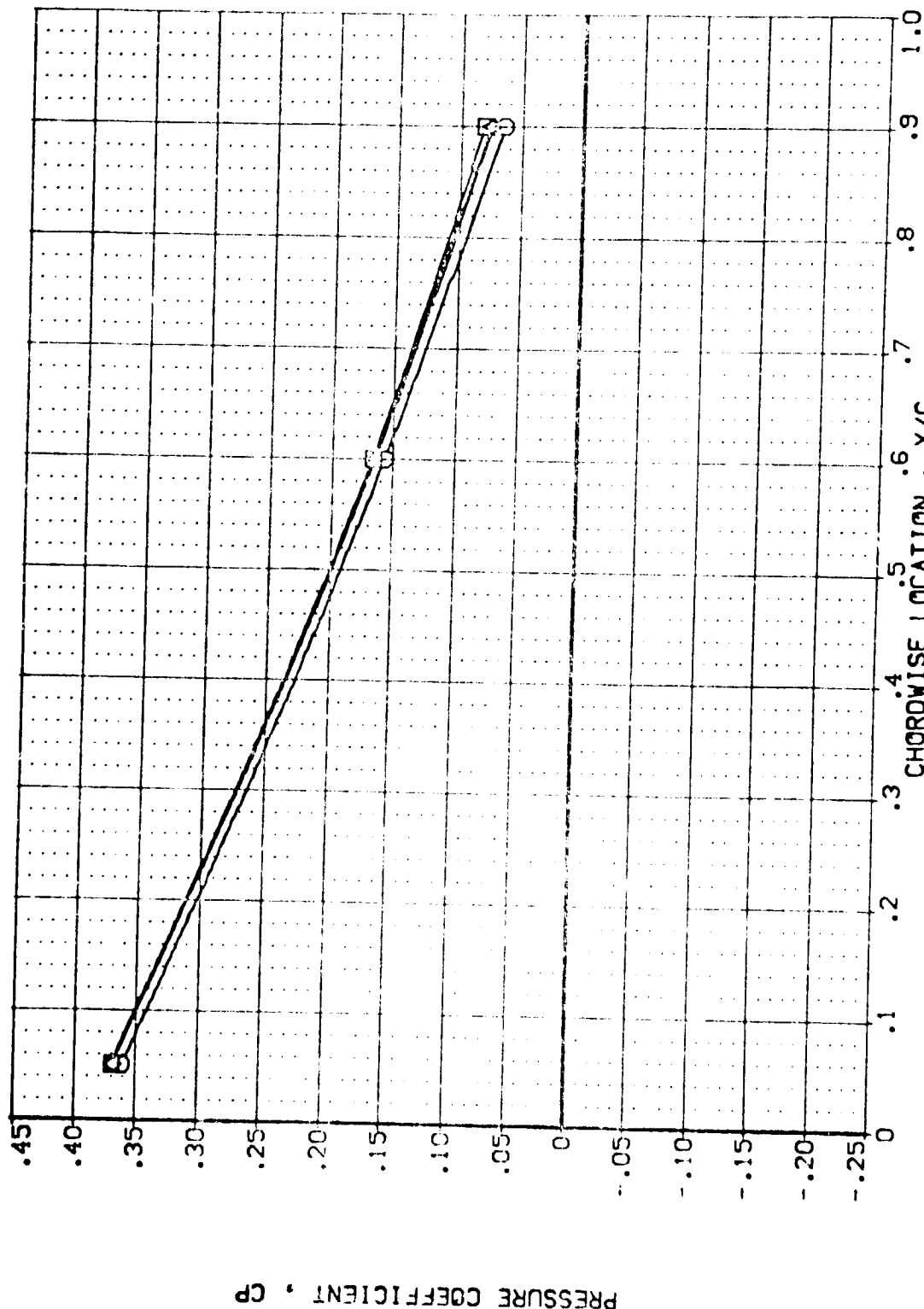
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER
.000
1.000
2.000
1.000

DPR
23.960
23.850

SRPR
.826
.826

GIMBAL
1.000
1.000
1.000
1.000



ORBITER ENGINE OUT EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 6.000 Y/B = .887

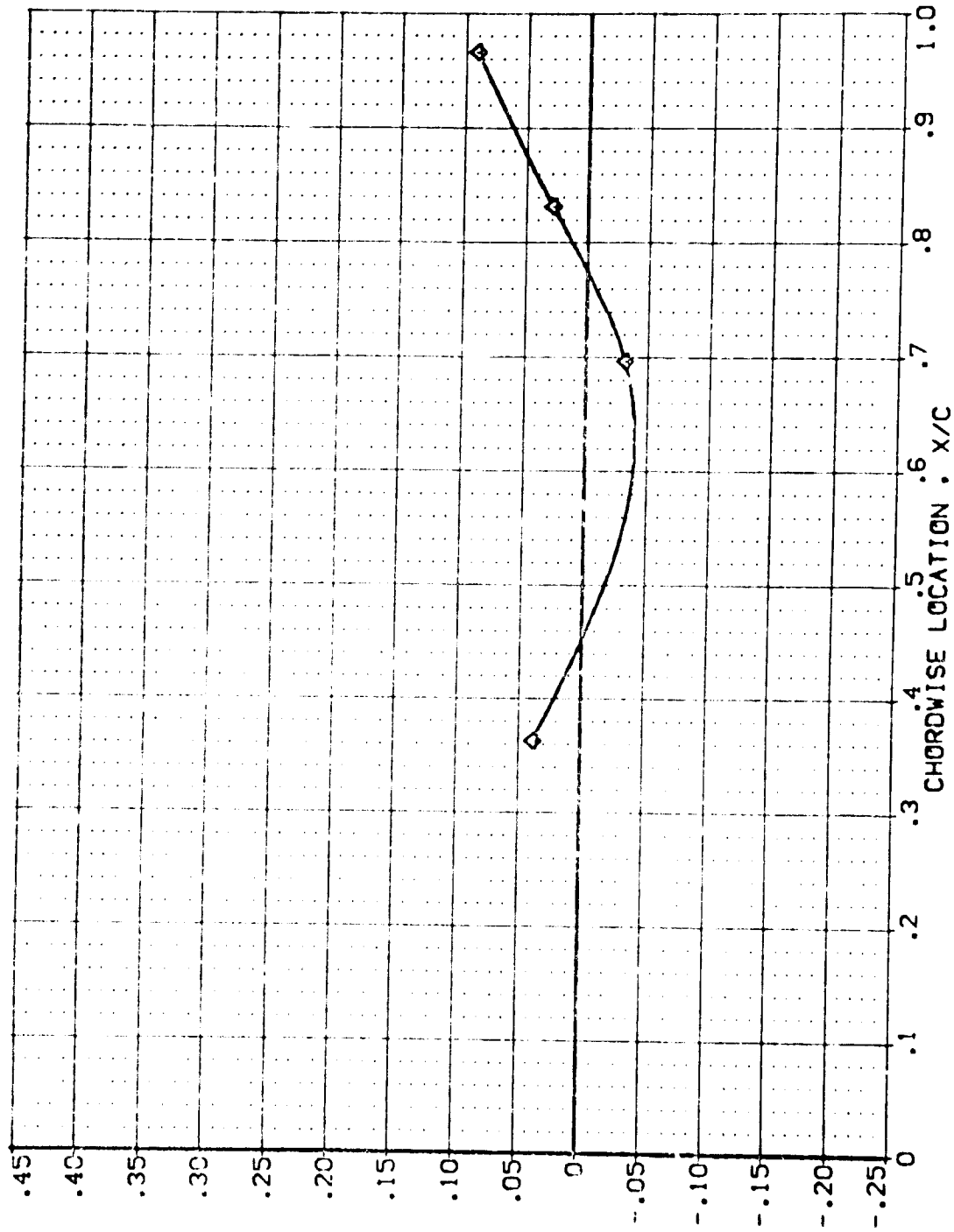
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (U1007) AYES 87-710 [A]2C [0] T [5] S1
 (U1007A) AYES 87-710 [A]2C [0] T [5] S1
 (U1007B) AYES 87-710 [A]2C [0] T [5] S1
 (U1007C) AYES 87-710 [A]2C [0] T [5] S1

POWER 0.000
 1.000
 1.000
 1.000
 1.000
 1.000

SRPR 0.916
 0.916
 0.916
 0.916
 0.916
 0.916

SRMBAL 1.000
 1.000
 1.000
 1.000
 1.000
 1.000

UPPER WING PRESSURE
 UPPER WING PRESSURE
 UPPER WING PRESSURE
 UPPER WING PRESSURE
 UPPER WING PRESSURE
 UPPER WING PRESSURE



PRESSURE COEFFICIENT, CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .299

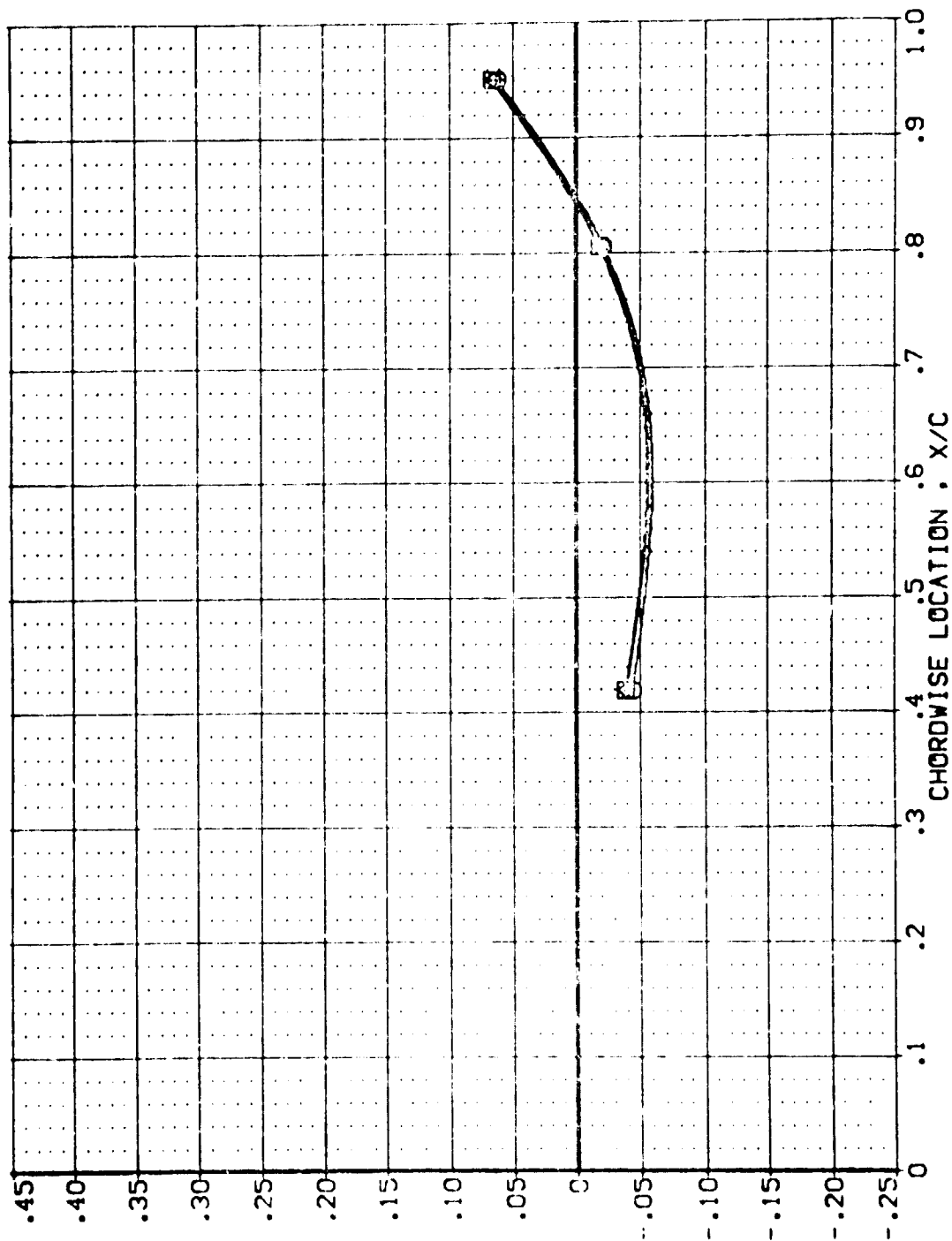
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB7037)  AMES 87-710
 (UB7034)  AMES 87-710
 (UB7073)  AMES 87-710
 (UB7072)  AMES 87-710

AI2C 01 T1 S1 UPPER WING PRESSURE
 AI2C 01 T1 S1 UPPER WING PRESSURE
 AI2C 01 T1 S4 UPPER WING PRESSURE
 AI2C 01 T1 S4 UPPER WING PRESSURE

POWER CFR SFRP GIMBAL
 .000 31.260 .916 .000
 1.000 31.260 .916 .000
 1.000 31.260 .916 .000

PRESSURE COEFFICIENT, CP



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

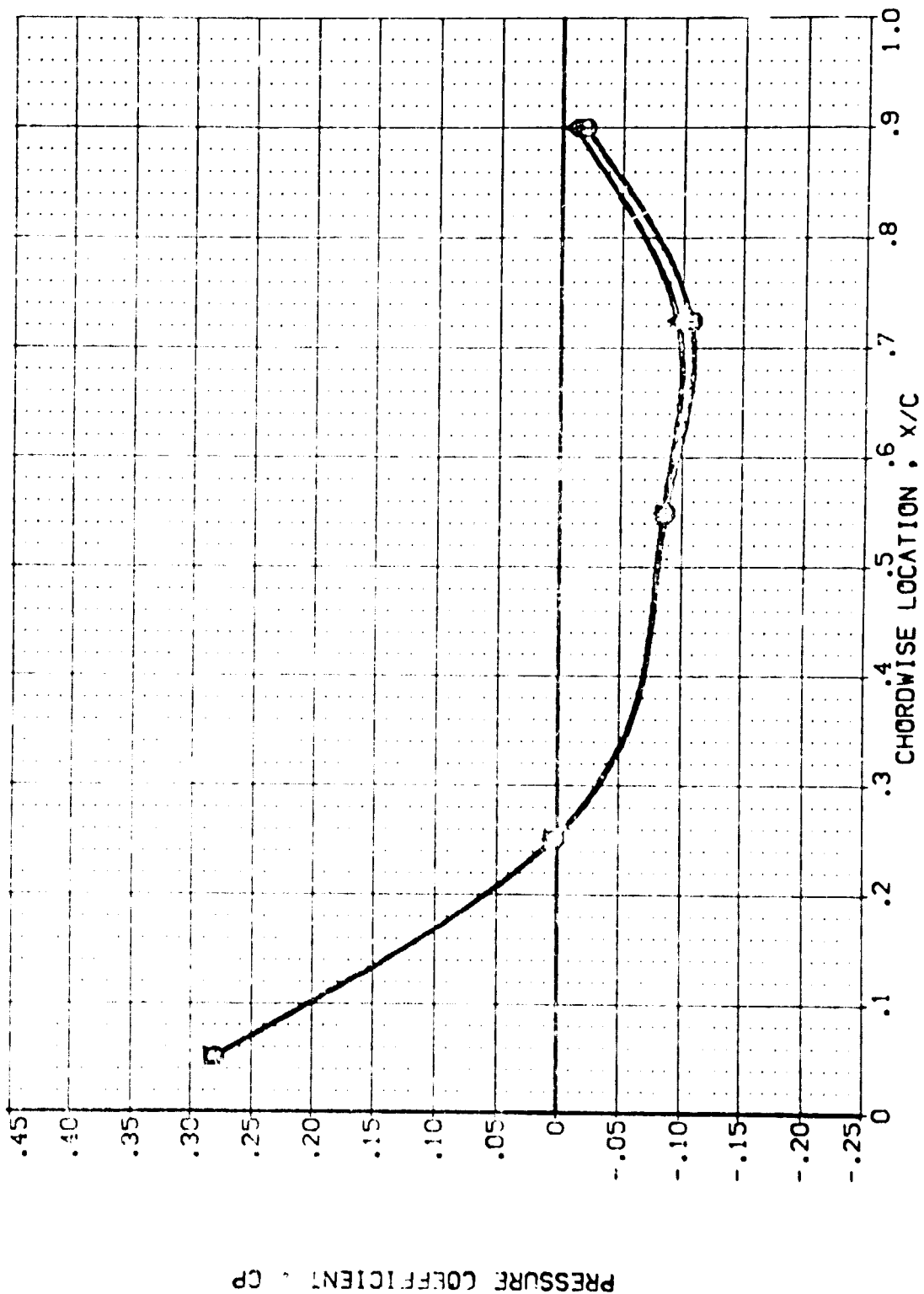
MACH = 2.500 ALPHA = -8.000 Y,3 = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

AXES 07-710	WING	UPPER	WING	PRESSURE
AXES 07-710	WING	UPPER	WING	PRESSURE
AXES 07-710	WING	UPPER	WING	PRESSURE
AXES 07-710	WING	UPPER	WING	PRESSURE

POWER G/R S/RP G/H3AL

1.000	31.750	.916	1.000
1.000	31.200	.916	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL

(UB2007)
(UB2004)
(UB2073)
(UB2072)

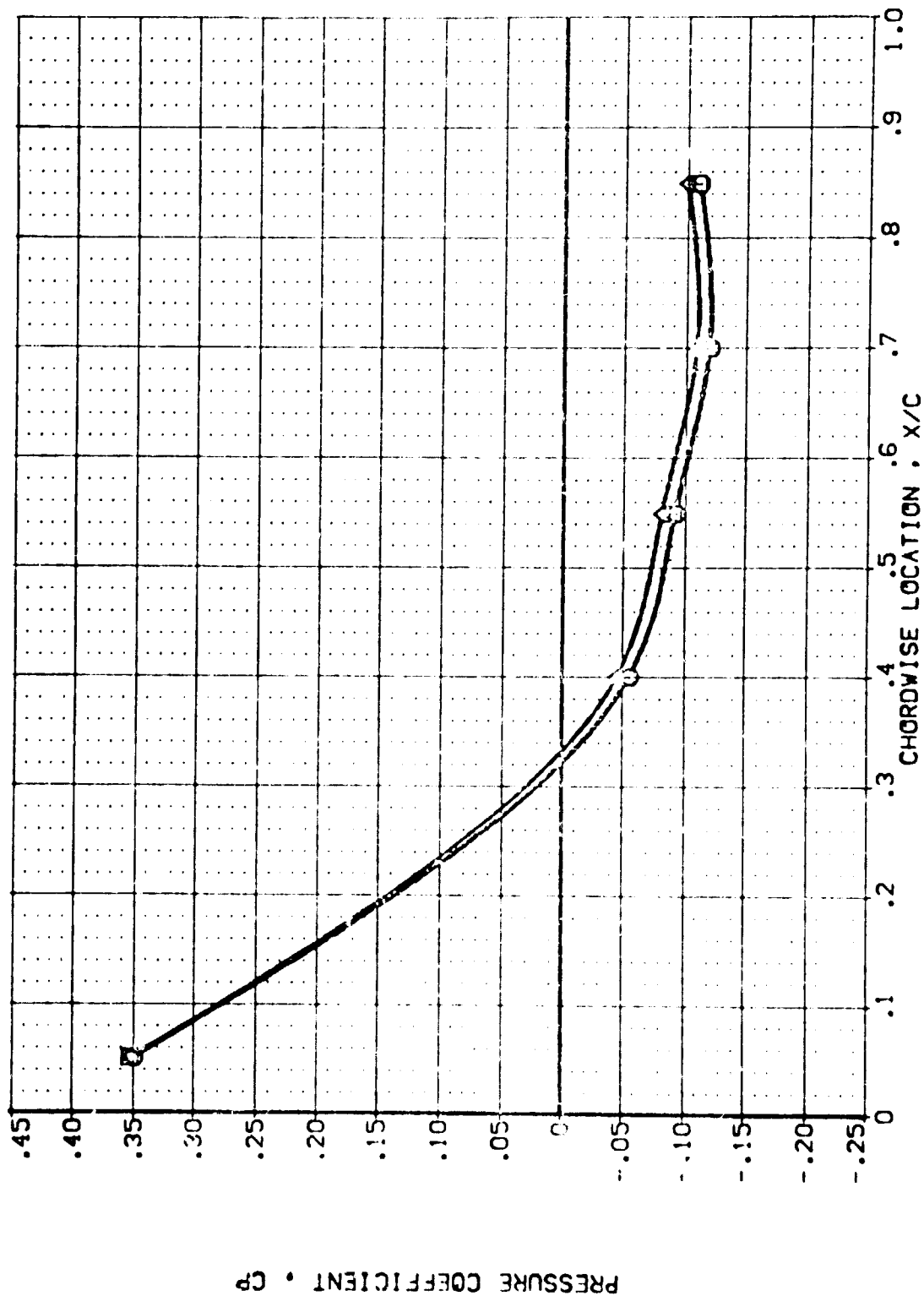
CONFIGURATION DESCRIPTION

AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S4 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S4 UPPER WING PRESSURE

POWER 0.000
1.000
1.000
1.000

CFR 31.260
31.260
31.260
31.260

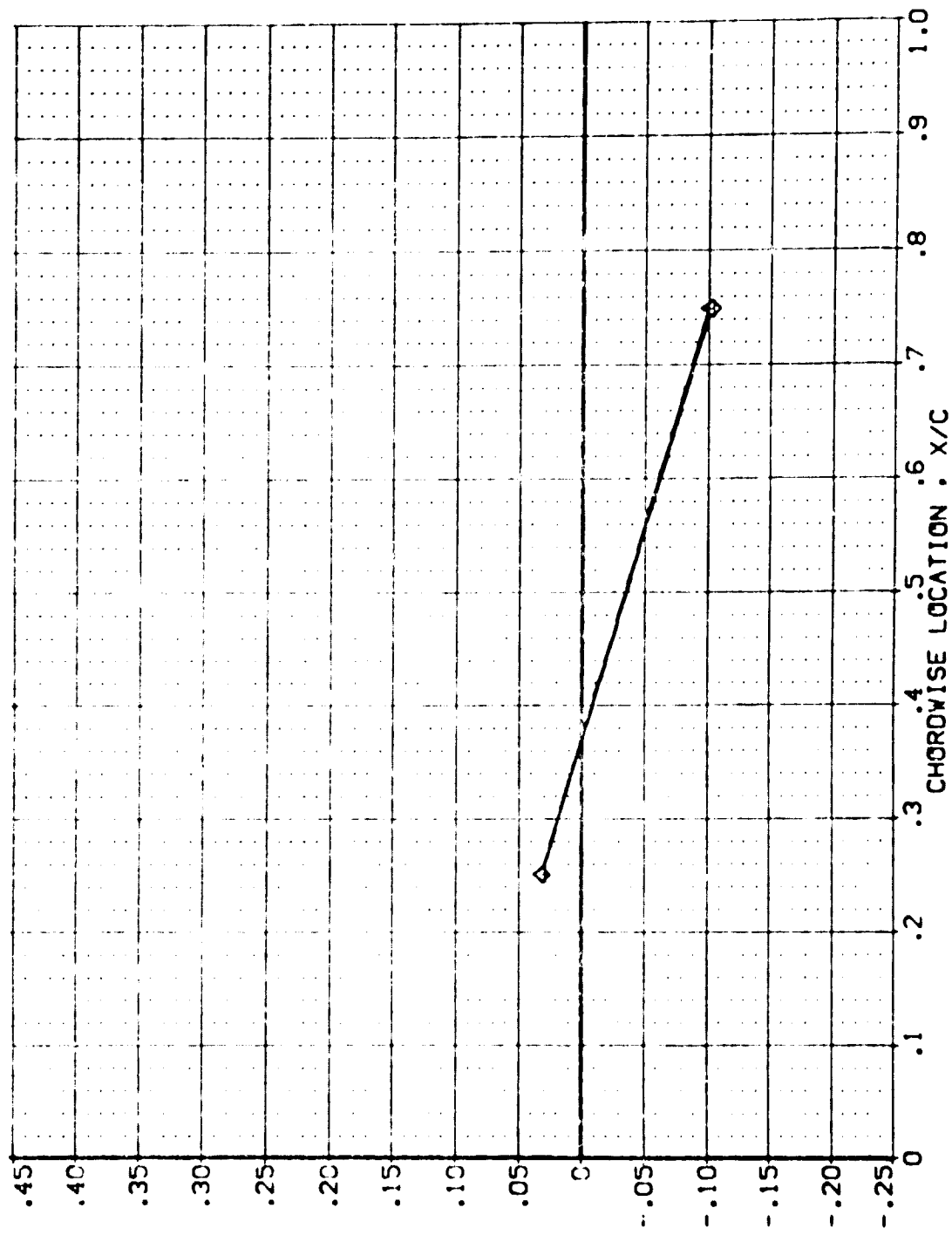
GIMBAL 1.000
1.000
1.000
1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .673

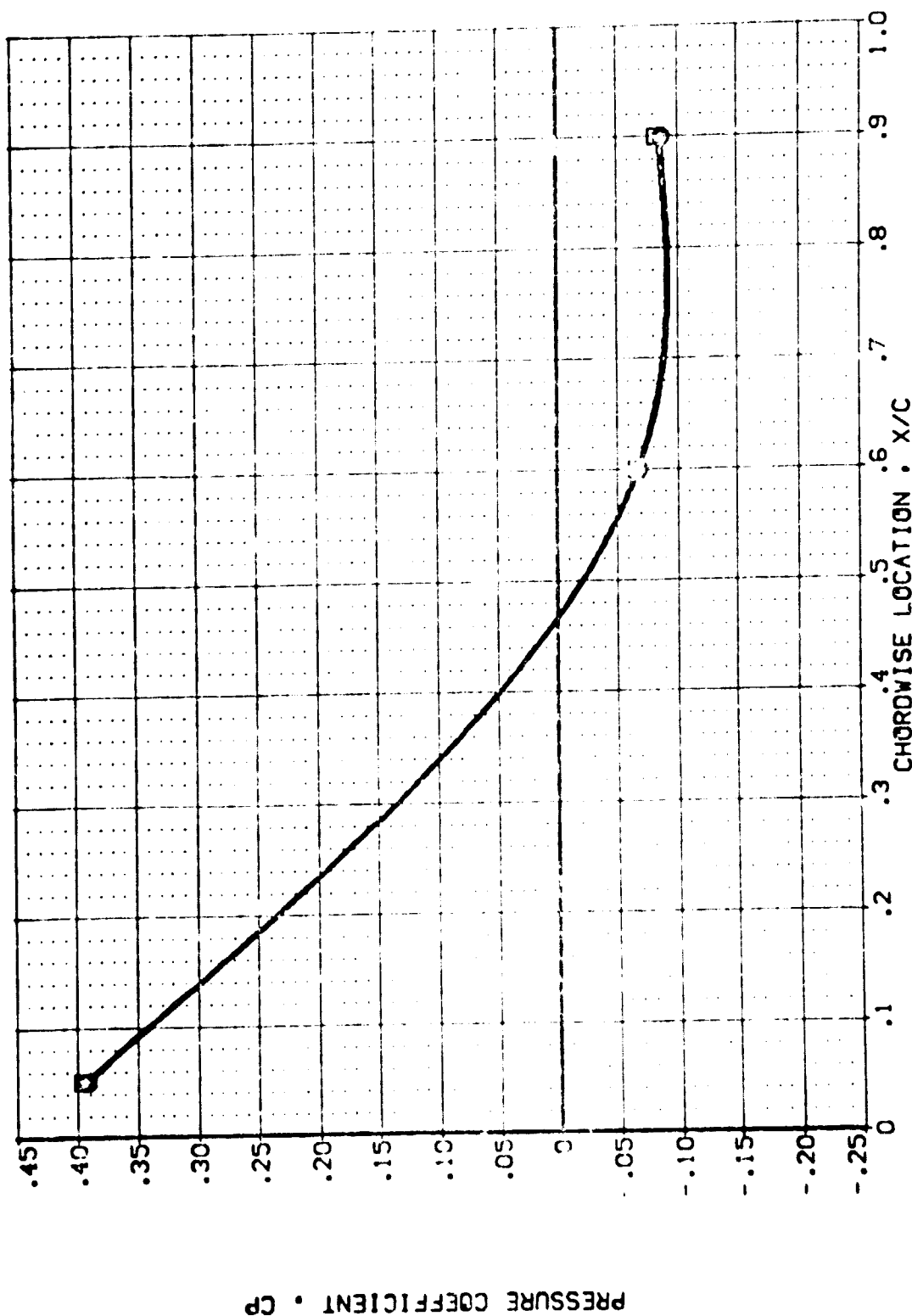
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	C/R	STPR	G/HBAL
ALC371	AMES 87-710 [A] [C] [0] [1] [S] [I] UPPER WING PRESSURE	.000			.000
ALC372	AMES 87-710 [A] [C] [0] [1] [S] [I] UPPER WING PRESSURE	.000	31.260	.316	.000
ALC373	AMES 87-710 [A] [C] [0] [1] [S] [I] UPPER WING PRESSURE	.000			.000
ALC374	AMES 87-710 [A] [C] [0] [1] [S] [I] UPPER WING PRESSURE	.000	31.260	.316	.000



PRESSURE COEFFICIENT, CP

PLUME AND SR3 SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

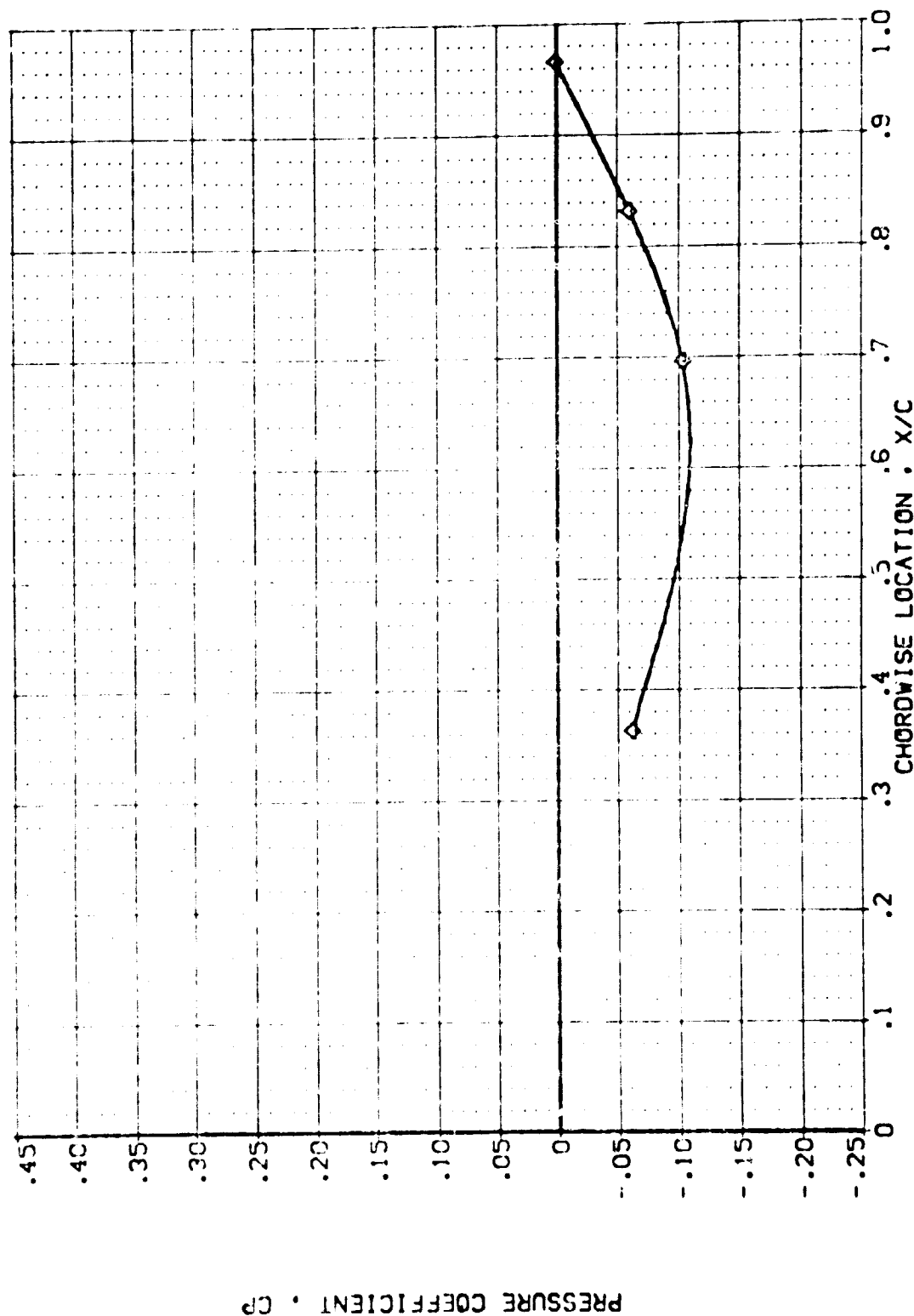
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SOFR	GIMBAL
(UB0037)	AVES 87-710	1.000			1.000
(UB0038)	AVES 87-710	1.000	31.260	.916	1.000
(UB0039)	AVES 87-710	1.000	31.260	.916	1.000
(UB0040)	AVES 87-710	1.000	31.260	.916	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .887 PAGE 186

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	SPR	SWPR	GIMBAL
US 7037	AMES 87-710 A12C 01 T S1 UPPER WING PRESSURE	.000			.000
US 7038	AMES 87-710 A12C 01 T S1 UPPER WING PRESSURE	.000	31.260	.916	.000
US 7039	AMES 87-710 A12C 01 T S1 UPPER WING PRESSURE	.000	31.260	.916	.000
US 7040	AMES 87-710 A12C 01 T S1 UPPER WING PRESSURE	.000	31.260	.916	.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .299 PAGE 187

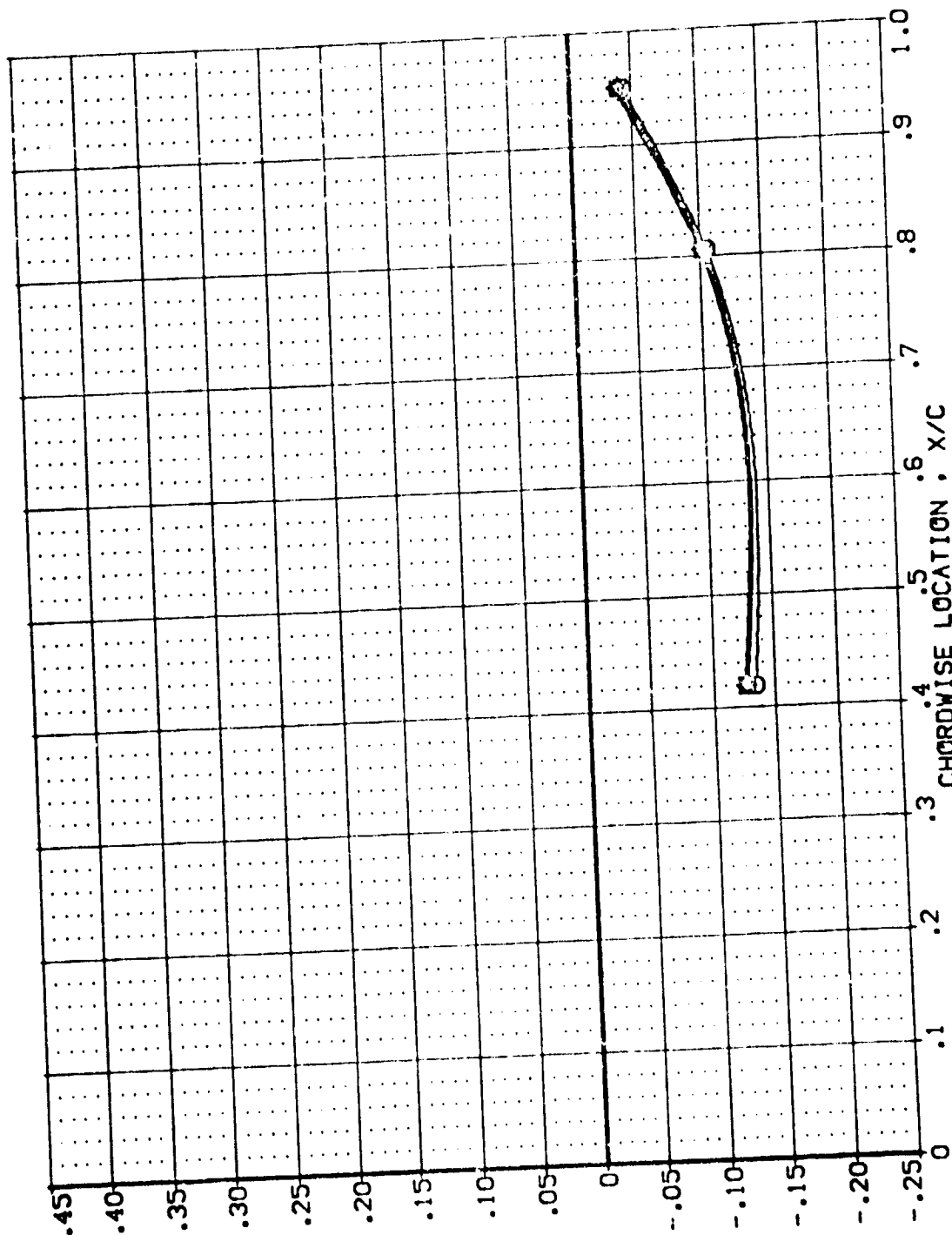
PRESSURE COEFFICIENT • CP

DATA SET SYMBOL
(UB2037)
(UB2038)
(UB2039)
(UB2040)

CONFIGURATION DESCRIPTION
AHS 87-710 IAI2C 01 T1 S1
AHS 87-710 IAI2C 01 T1 S1
AHS 87-710 IAI2C 01 T1 S1
AHS 87-710 IAI2C 01 T1 S1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER DPR SPPR GIMBAL
.000 31.260 .916 1.000
1.000 31.260 .916 1.000
1.000 31.260 .916 1.000

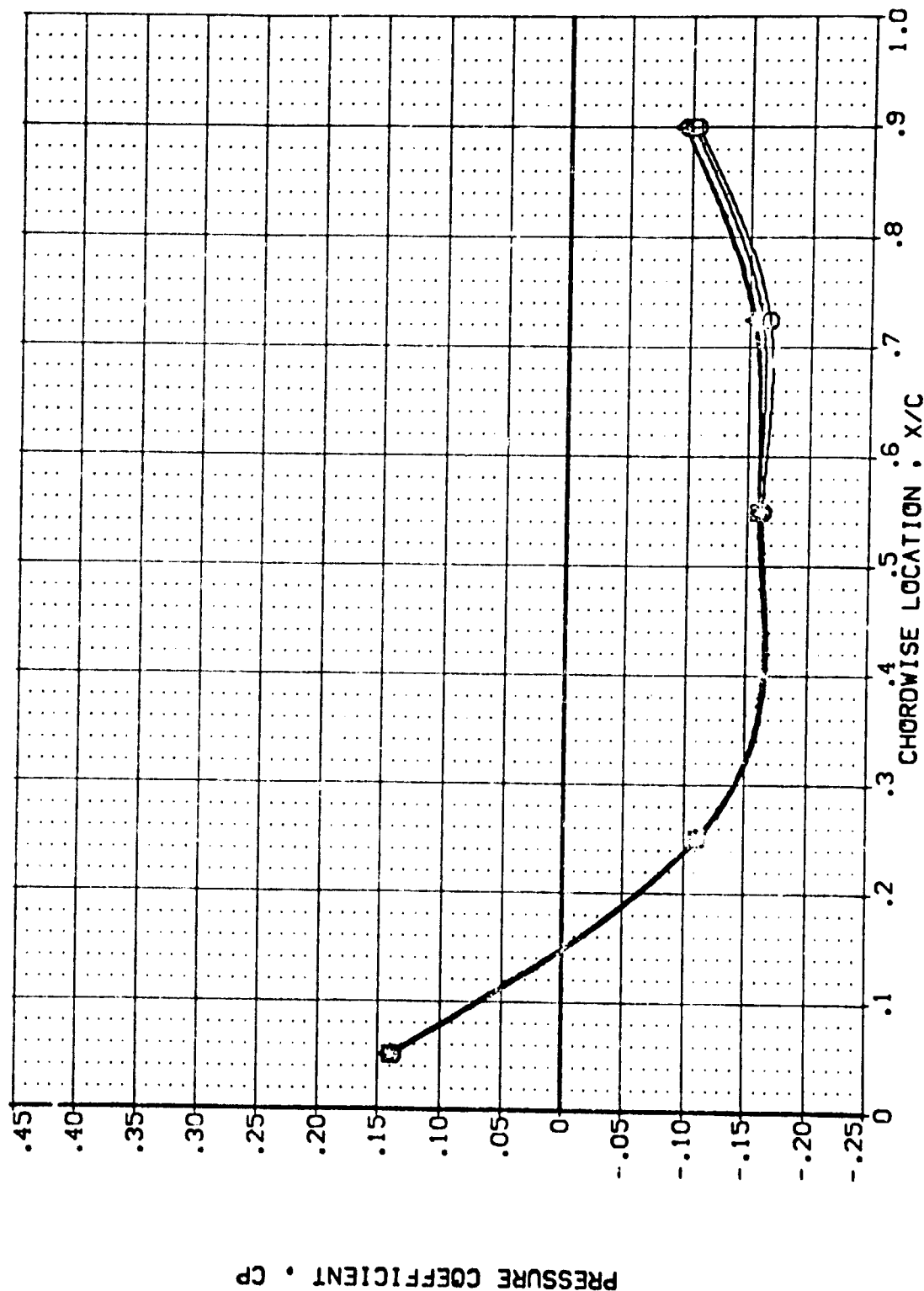


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	QFR	SNRPR	GHMBAL
(U82037)	AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	1.000	31.260	.916	1.000
(U82034)	AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	1.000	31.260	.916	1.000
(U82073)	AVES 87-710 [A12C 01 T1 S4] UPPER WING PRESSURE	1.000	31.260	.916	1.000
(U82072)	AVES 87-710 [A12C 01 T1 S4] UPPER WING PRESSURE	1.000	31.260	.916	1.000



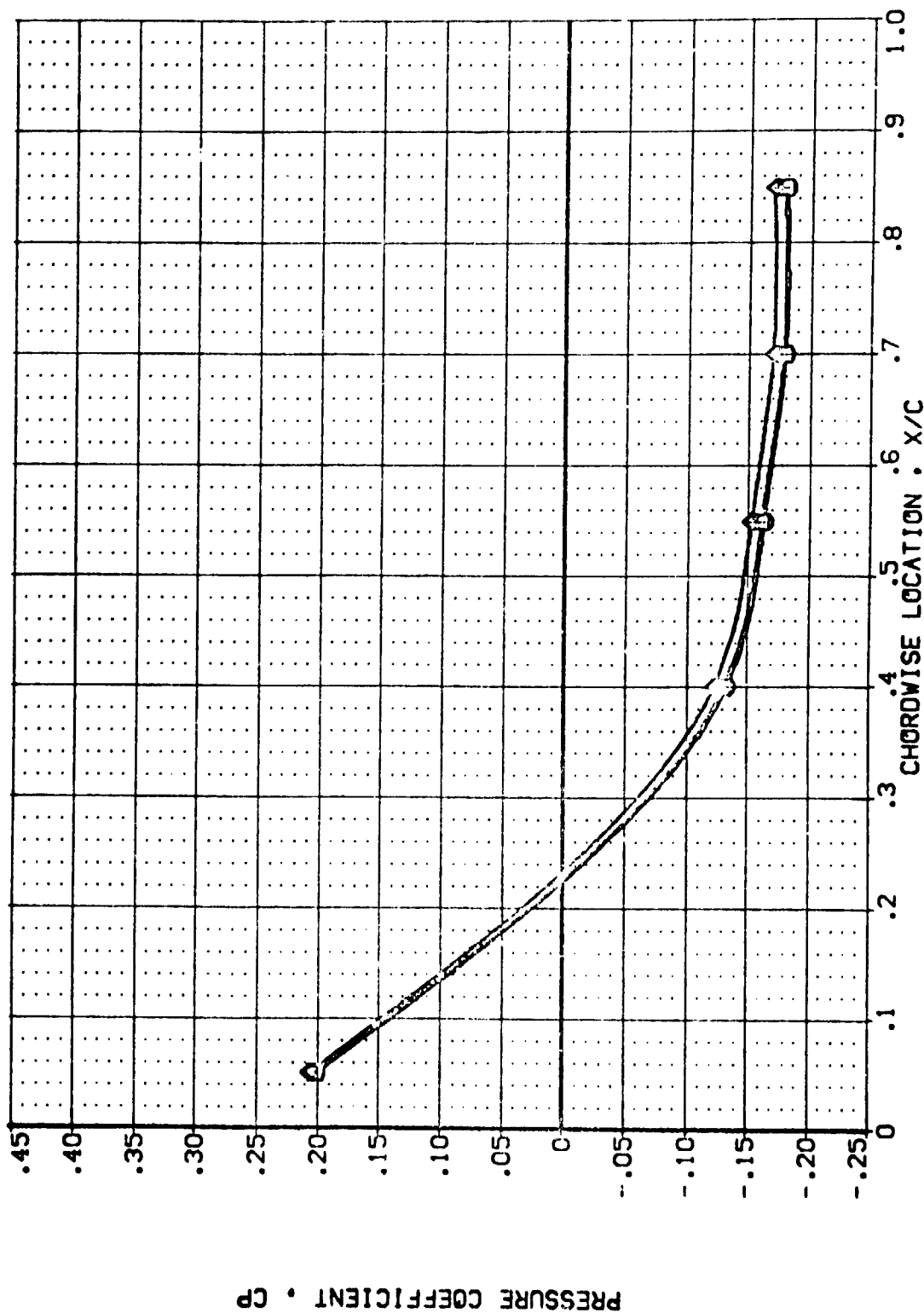
PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL
(UBZ007)
(UBZ034)
(UBZ073)
(UBZ072)

CONFIGURATION DESCRIPTION
AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 01 T1 S4 UPPER WING PRESSURE
AVES 87-710 1A12C 01 T1 S4 UPPER WING PRESSURE

POWER CRR SWPR GINBAL
.000 31.260 .916 1.000
1.000 31.260 .916 1.000
1.000 31.260 .916 1.000

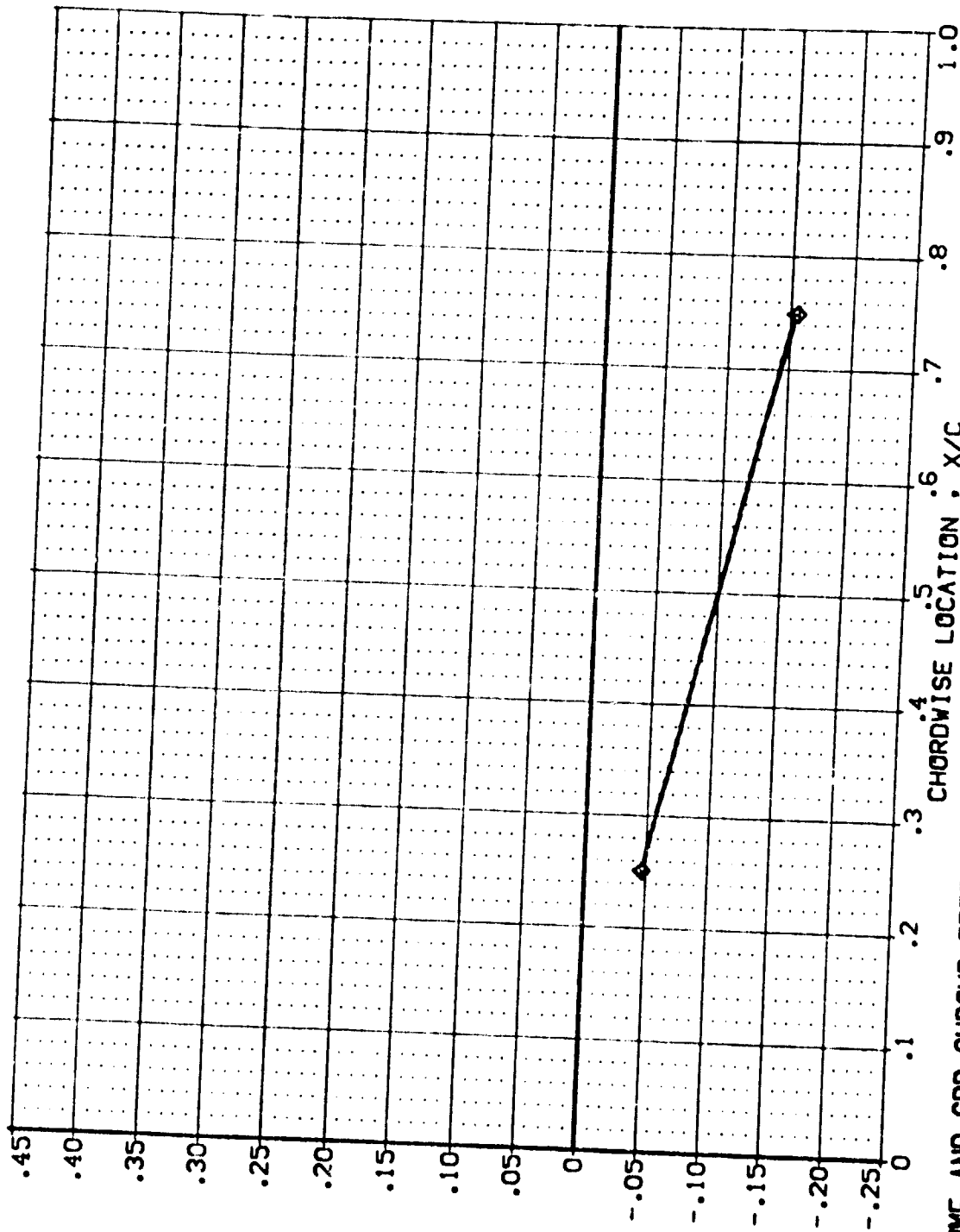


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UB2007) Q X AHES 87-710 [A]2C 01 T1 S1 UPPER WING PRESSURE
 (UB2004) Q X AHES 87-710 [A]2C 01 T1 S1 UPPER WING PRESSURE
 (UB2073) Q X AHES 87-710 [A]2C 01 T1 S4 UPPER WING PRESSURE
 (UB2072) Q X AHES 87-710 [A]2C 01 T1 S4 UPPER WING PRESSURE

POWER DPR SRPR GIMBAL
 .000 31.260 .916 1.000
 1.000 31.260 .916 1.000
 1.000 31.260 .916 1.000



PRESSURE COEFFICIENT • CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP
 MACH = 2.500 ALPHA = .000 Y/B = .780

DATA SET SYMBOL

(UB2037)
(UB2038)
(UB2039)
(UB2040)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

POWER
1.000
1.000
1.000
1.000

QPR
31.260
31.260

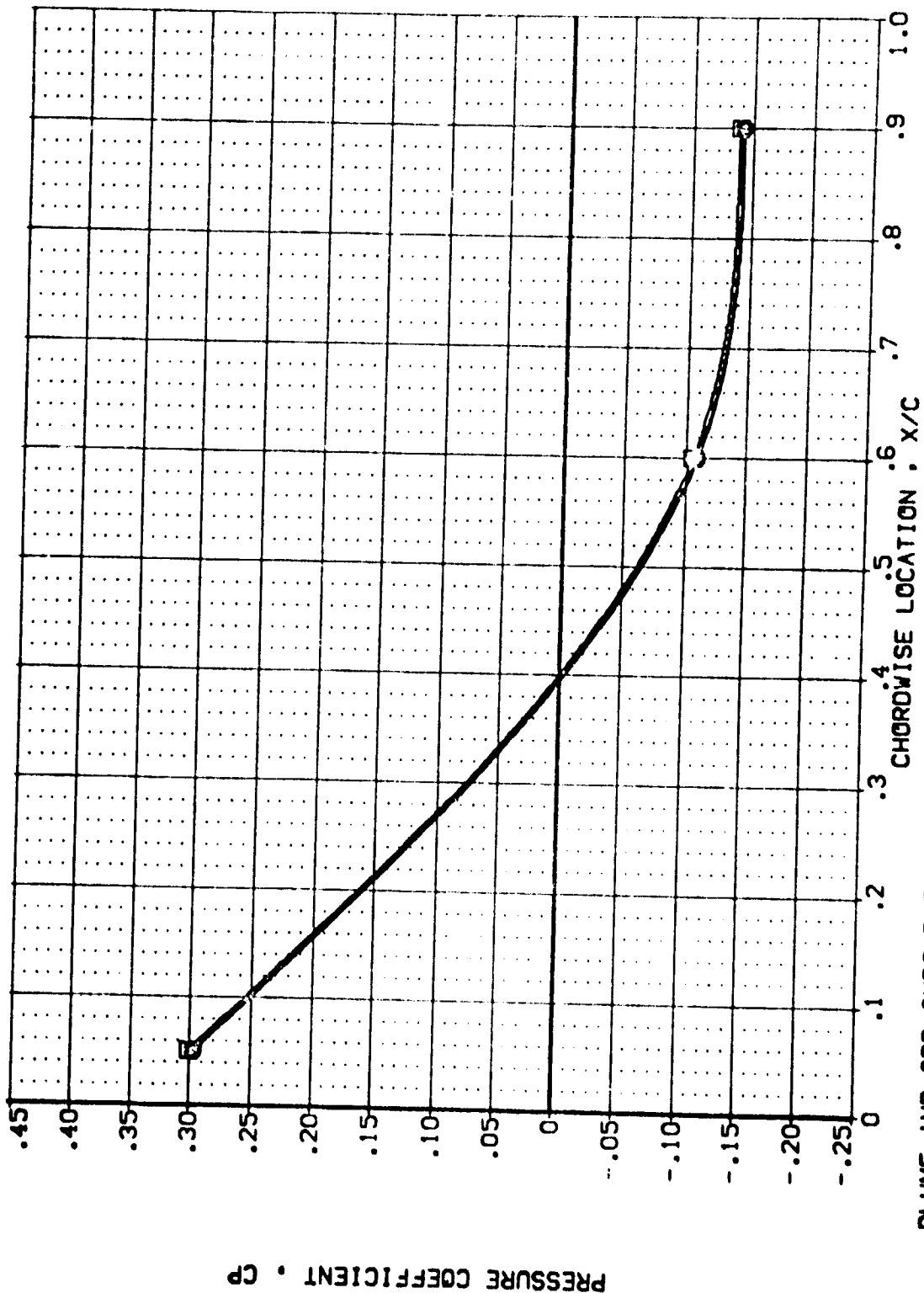
SHPR
.916
.916

SIMBAL
1.000
1.000
1.000
1.000

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

TI S1
TI S1
TI S1
TI S1

TI S4
TI S4
TI S4
TI S4



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .887

DATA SET SY-BOL

(UB2007)
(UB2004)
(UB2073)
(UB2072)

CONFIGURATION DESCRIPTION

AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER

.000
1.000
1.000
1.000

GPR

31.260
31.260

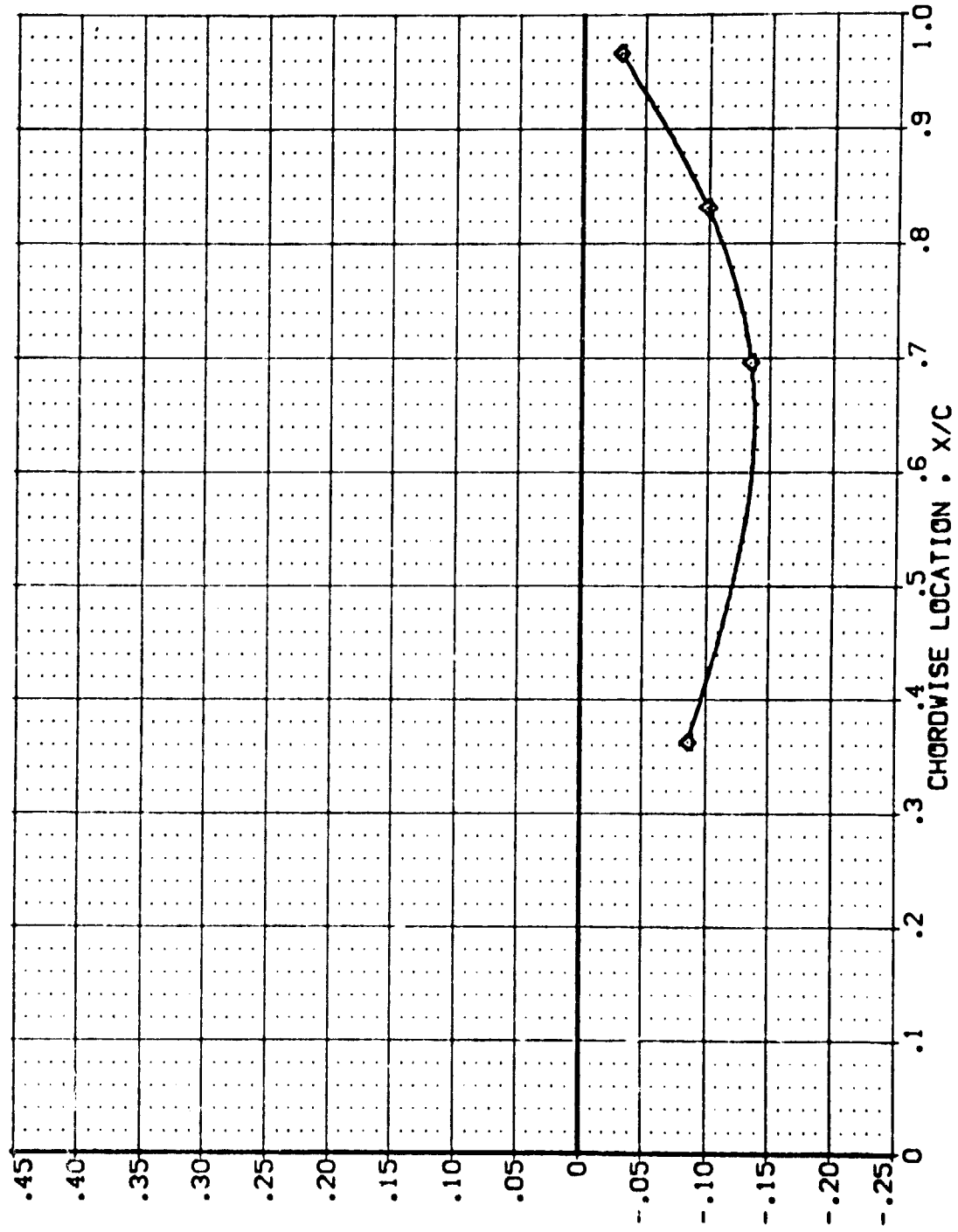
SR-PR

.916
.916

GI-BAL

1.000
1.000
1.000
1.000

PRESSURE COEFFICIENT, CP



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .299

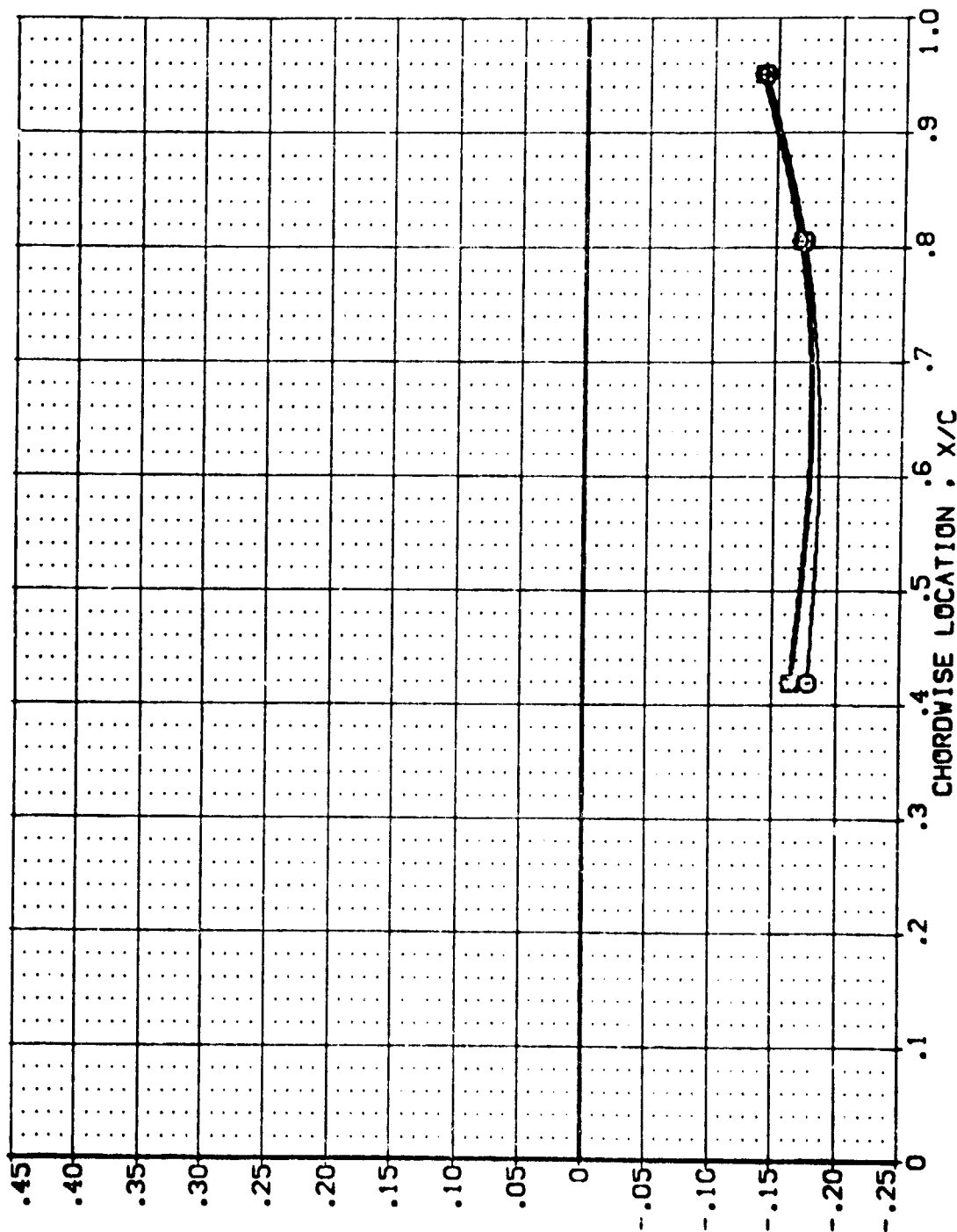
DATA SET SYMBOL

(UB2007)
(UB2004)
(UB2073)
(UB2072)

CONFIGURATION DESCRIPTION

AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S4 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S4 UPPER WING PRESSURE

POWER GPR SR-PR GIMBAL
1.000 31.260 .916 1.000
1.000 31.260 .916 1.000
1.000 31.260 .916 1.000



PRESSURE COEFFICIENT, CP

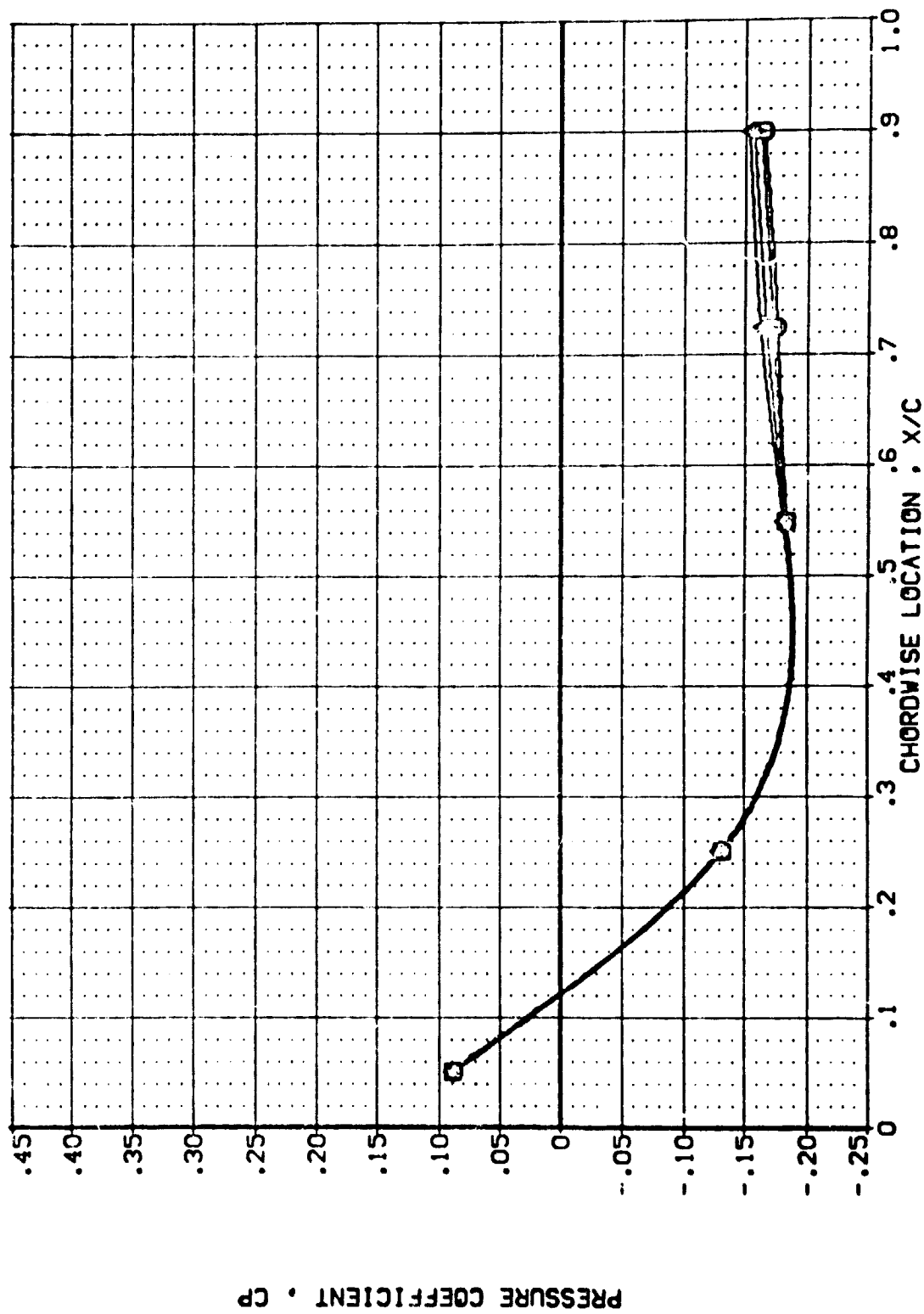
PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .427

PAGE 194

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[UB2037]	AVES 87-710	[A12C 01 T1 S1]	UPPER WING PRESSURE	POWER	OPR	SR-PR	01MBAL
[UB2034]	AVES 87-710	[A12C 01 T1 S1]	UPPER WING PRESSURE	1.000	31.260	.916	1.000
[UB2073]	AVES 87-710	[A12C 01 T1 S4]	UPPER WING PRESSURE	1.000			1.000
[UB2072]	AVES 87-710	[A12C 01 T1 S4]	UPPER WING PRESSURE	1.000	31.260	.916	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .534

DATA SET SYMBOL
 (UB00037)
 (UB00034)
 (UB00073)
 (UB00072)

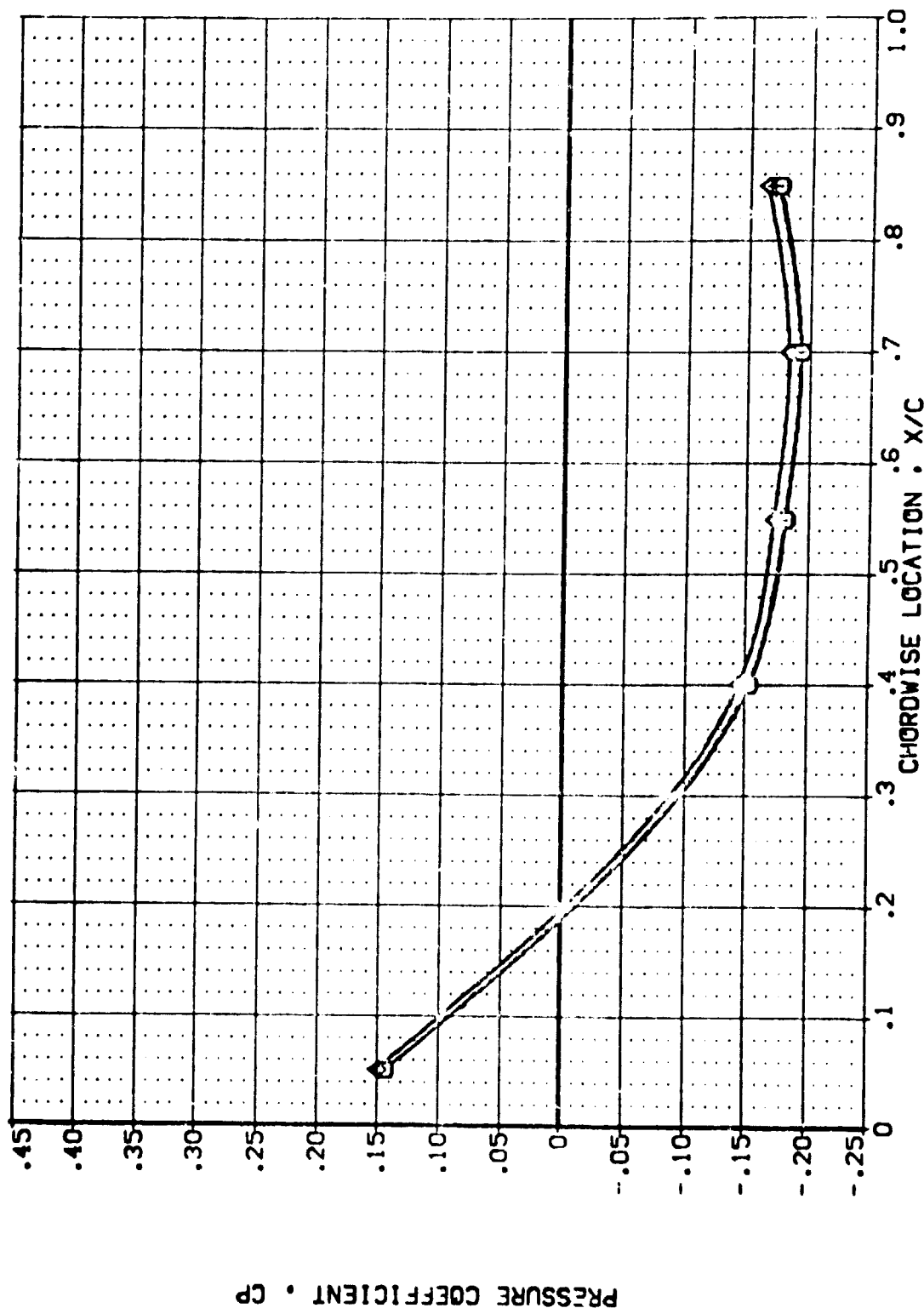
CONFIGURATION DESCRIPTION
 ASES 87-710 IAI2C 01 T1 S1
 ASES 87-710 IAI2C 01 T1 S1
 ASES 87-710 IAI2C 01 T1 S1
 ASES 87-710 IAI2C 01 T1 S1

POWER
 .000
 1.000
 1.000
 1.000

DPR
 31.260
 31.260

SPR
 .916
 .916

QINBAL
 1.000
 1.000
 1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

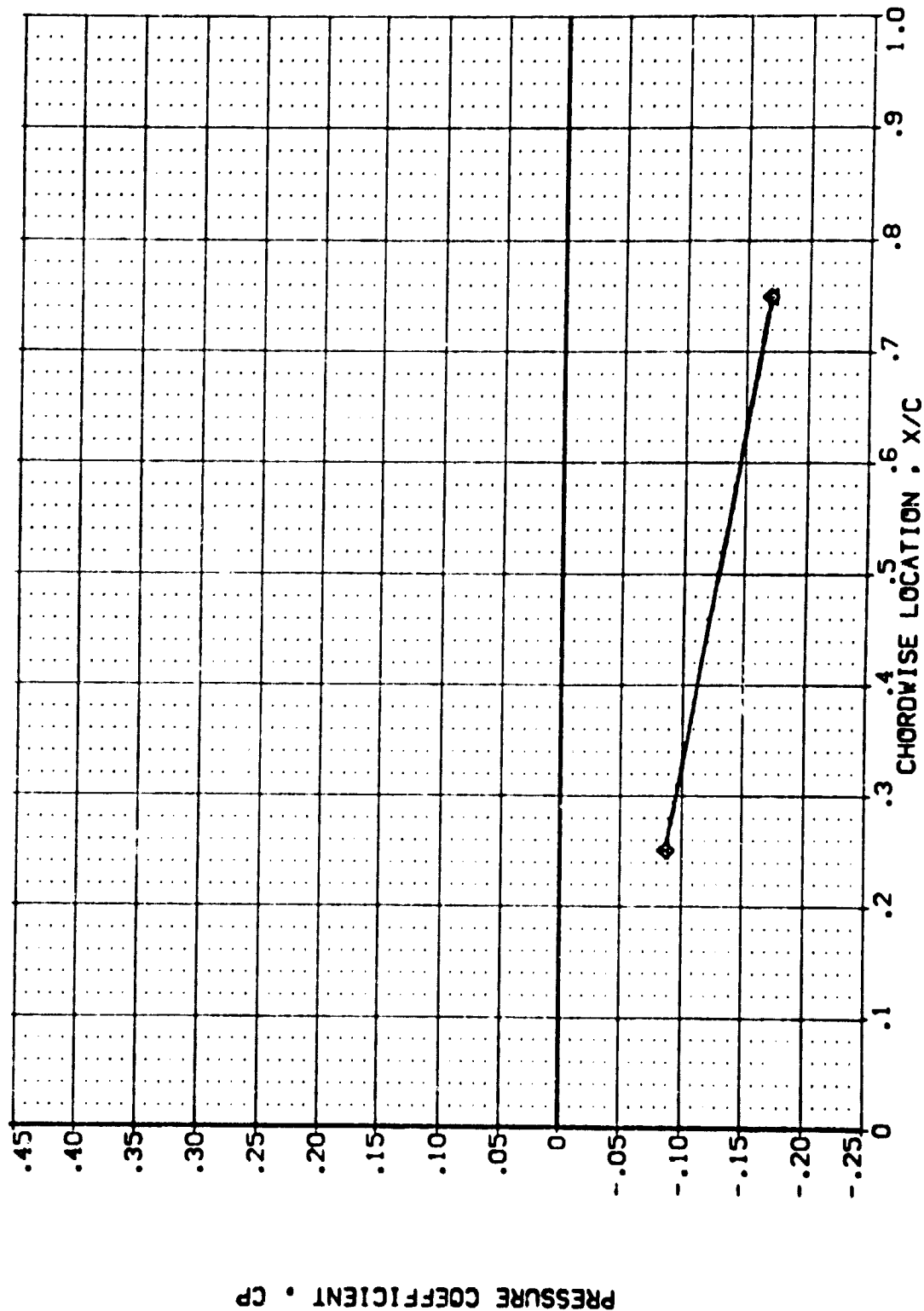
MACH = 2.500 ALPHA = 6.000 Y/B = .673

DATA SET SYMBOL

(L80037)
(L80004)
(L80073)
(L80072)

CONFIGURATION DESCRIPTION
AVES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IALZC 01 T1 S4 UPPER WING PRESSURE
AVES 87-710 IALZC 01 T1 S4 UPPER WING PRESSURE

POWER DPR SDRR GIMBAL
.000 31.260 1.000
1.000 .916 1.000
1.000 31.260 .916 1.000

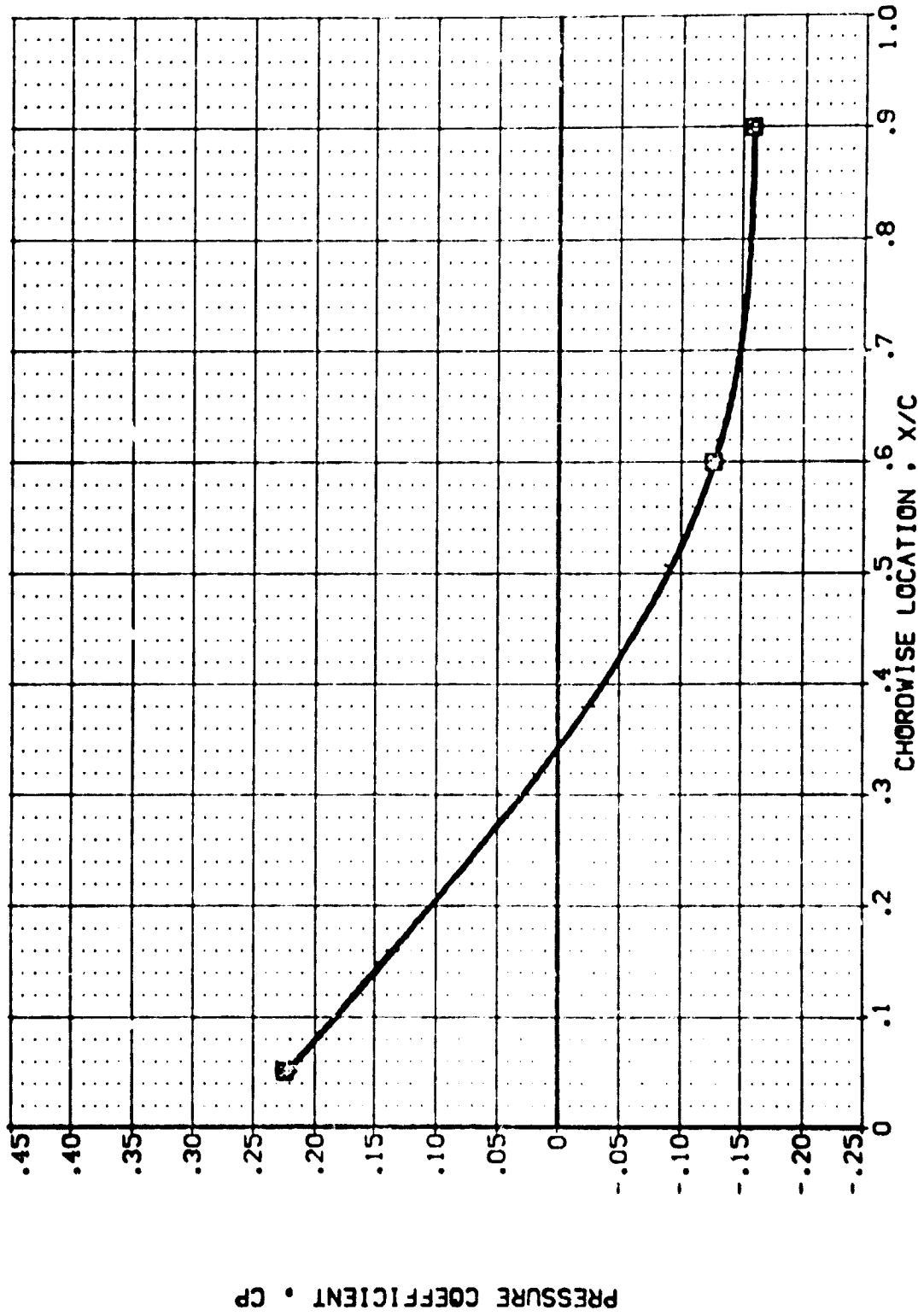


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB0007)	AVES 87-710	IA12C 01	TI S1	UPPER WING	PRESSURE	POWER	C/R	SRPR	GINBAL
(UB0004)	AVES 87-710	IA12C 01	TI S1	UPPER WING	PRESSURE	1.000	31.280	.916	1.000
(UB0073)	AVES 87-710	IA12C 01	TI S4	UPPER WING	PRESSURE	1.000	31.280	.916	1.000
(UB0072)	AVES 87-710	IA12C 01	TI S4	UPPER WING	PRESSURE	1.000	31.280	.916	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .887 PAGE 198

DATA SET SYMBOL

{UBZ0208}
{UBZ0201}
{UBZ0205}
{UBZ02074}

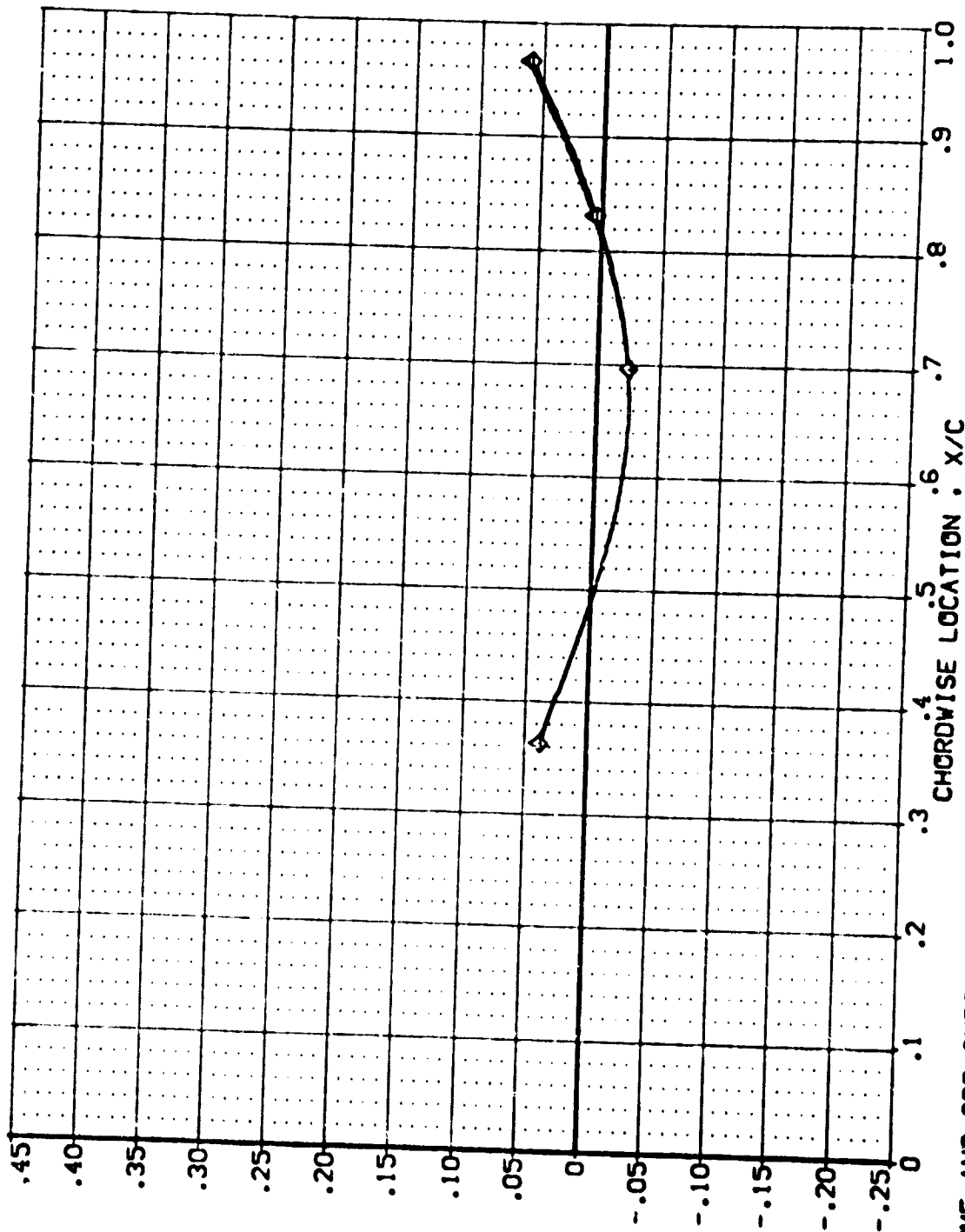
CONFIGURATION DESCRIPTION

AVES 87-710 [A] 2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 [A] 12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 [A] 12C 01 T1 S4 UPPER WING PRESSURE
AVES 87-710 [A] 12C 01 T1 S4 UPPER WING PRESSURE

POWER 0.000
1.000
1.000
1.000

OPR 26.860
26.860

SPRPR 0.000
0.000
0.000
0.000

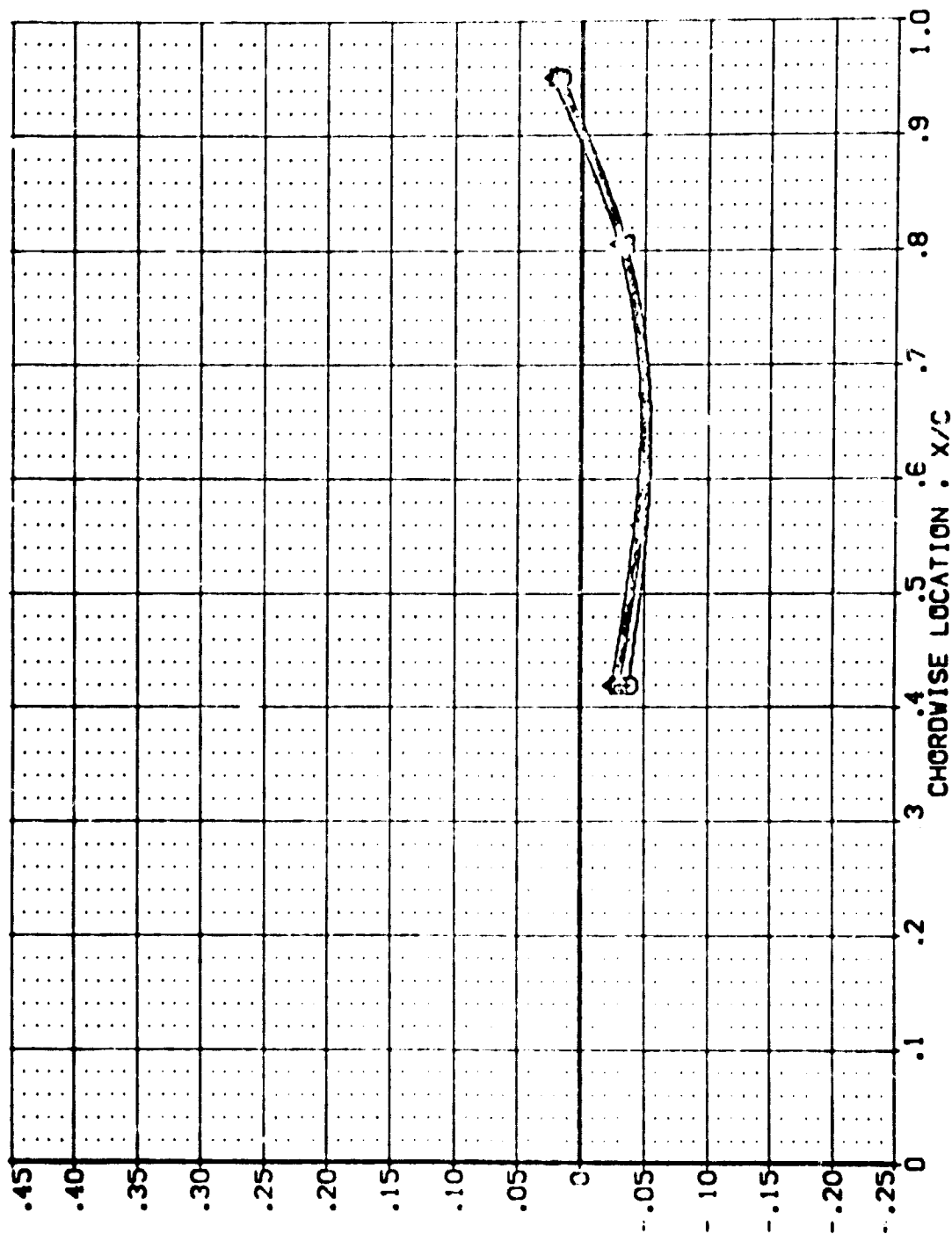


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UB0008) AYES 87-710 IAI2C 01 T1 S1
 (UB0009) AYES 87-710 IAI2C 01 T1 S1
 (UB0010) AYES 87-710 IAI2C 01 T1 S1
 (UB0011) AYES 87-710 IAI2C 01 T1 S1
 (UB0012) AYES 87-710 IAI2C 01 T1 S1
 (UB0013) AYES 87-710 IAI2C 01 T1 S1
 (UB0014) AYES 87-710 IAI2C 01 T1 S1

POWER CQR SQRPR GIBAL
 .000
 1.000 26.860 .768
 1.000 26.860 .768
 1.000 26.860 .768



PRESSURE COEFFICIENT, CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .427

PAGE 200

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ008)
(UBZ041)
(UBZ075)
(UBZ074)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

AI12C 01 T1 S1
AI12C 01 T1 S1
AI12C 01 T1 S1
AI12C 01 T1 S1

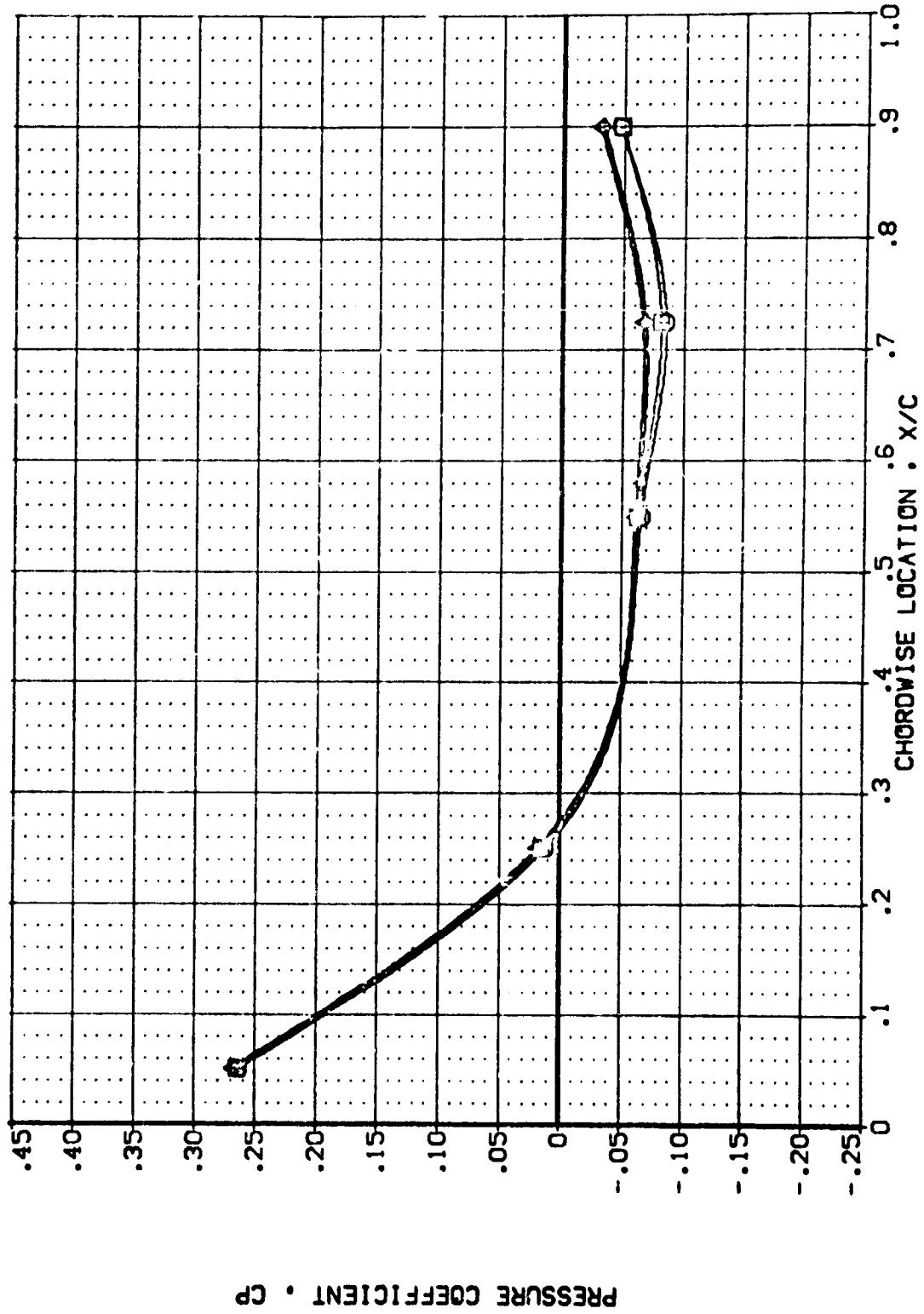
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER
.000
1.000
1.000
1.000

QPR
26.860
26.860
26.860

SQPR
.768
.768
.768

GIMBAL
1.000
1.000
1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

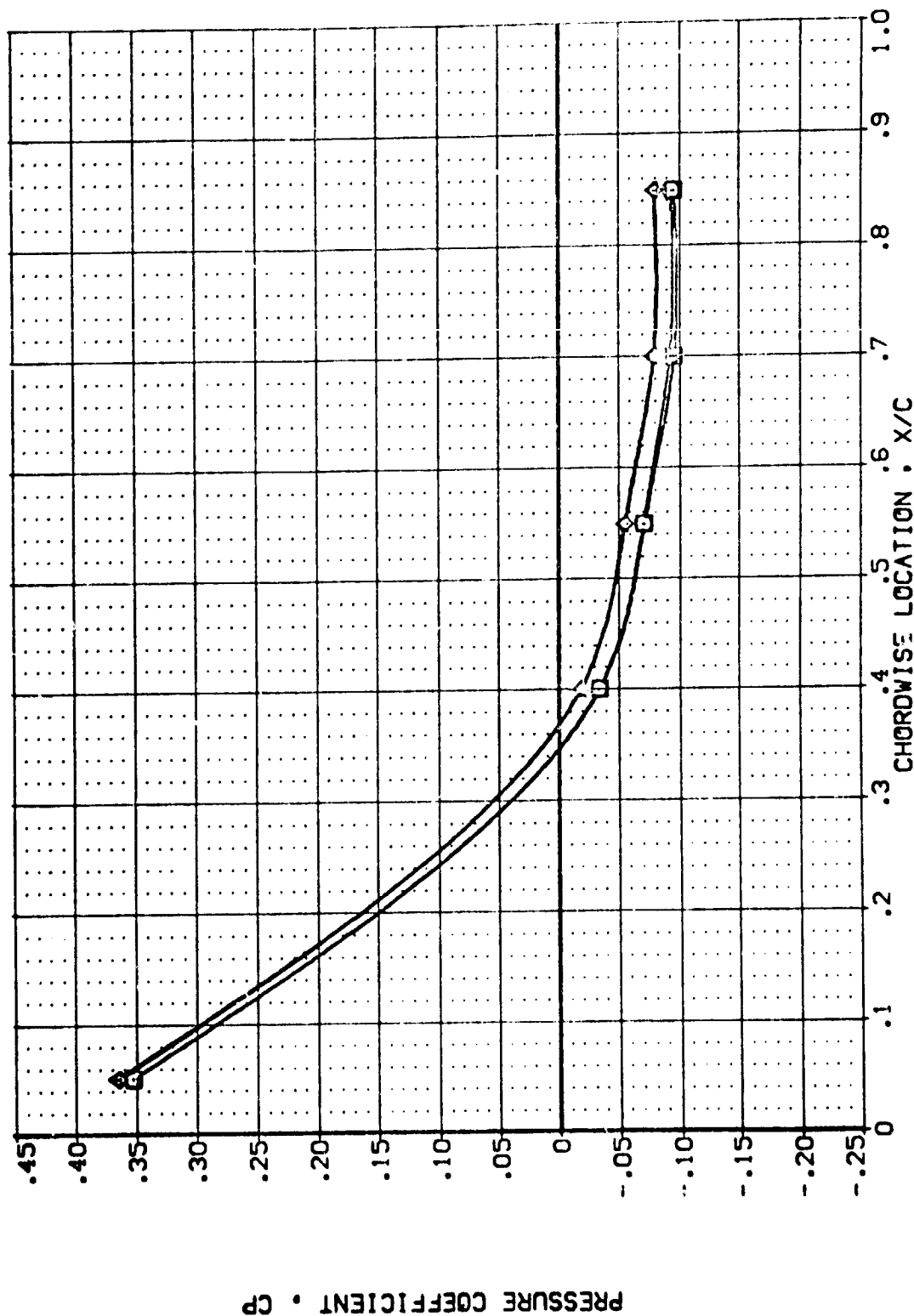
MACH = 3.000 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL
(UB20038)
(UB20041)
(UB20075)
(UB20074)

CONFIGURATION DESCRIPTION
AUES 87-710
AUES 87-710
AUES 87-710
AUES 87-710

SI SI SI SI
T1 T1 T1 T1
SI SI SI SI
T1 T1 T1 T1
SI SI SI SI
T1 T1 T1 T1

POWER C/P SR/PR G/MBAL
.000
1.000 26.860 .768
1.000 26.860 .768



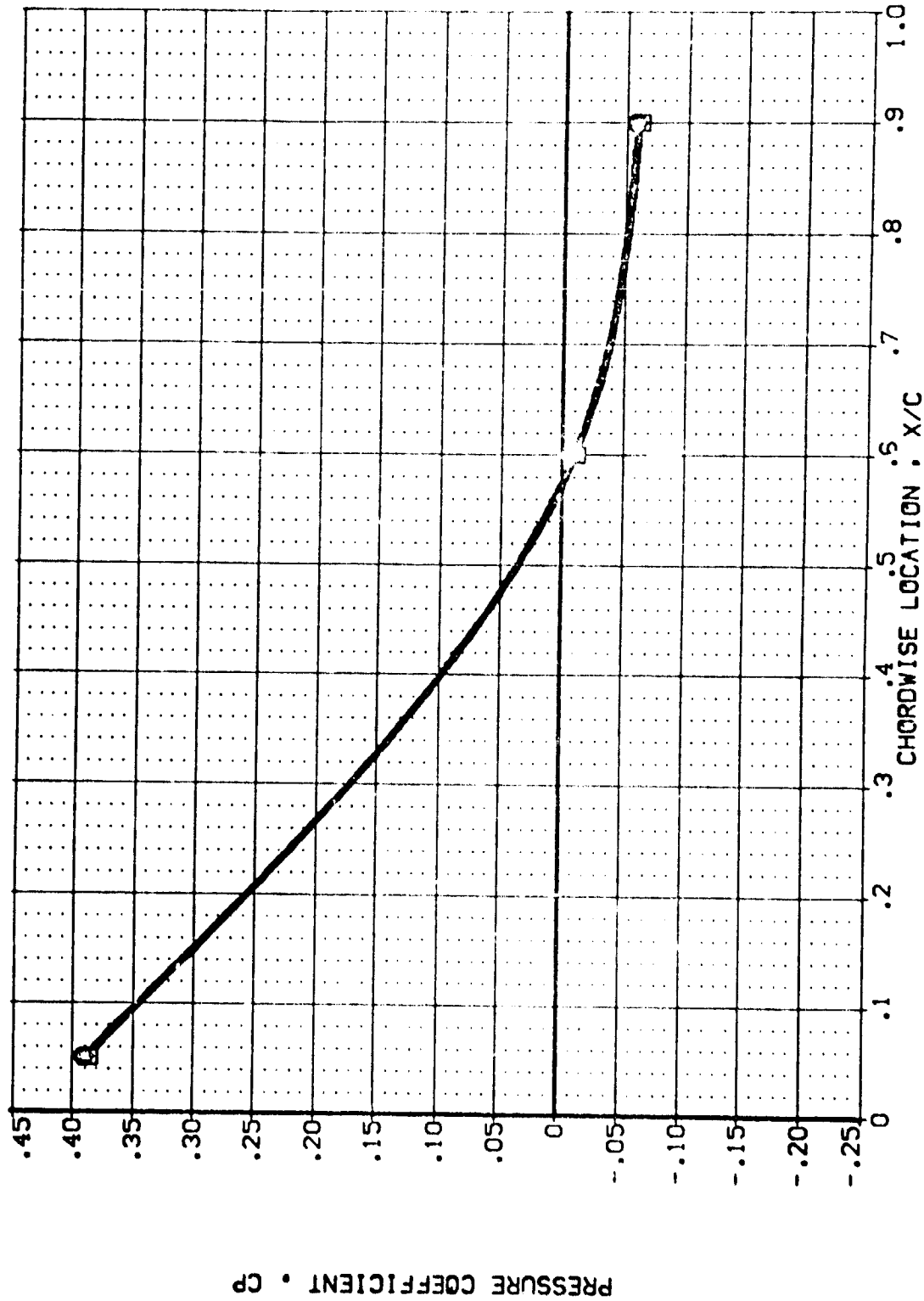
PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .673

PAGE 202

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2008)	AVES 87-710	IA12C	01	TI	SI	UPPER WING PRESSURE	POWER	CFR	SR-PR	GIPBAL
(UB2041)	AVES 87-710	IA12C	01	TI	SI	UPPER WING PRESSURE	.000			1.000
(UB2075)	AVES 87-710	IA12C	01	TI	SI	UPPER WING PRESSURE	1.000	26.860	.768	1.000
(UB2074)	AVES 87-710	IA12C	01	TI	SI	UPPER WING PRESSURE	1.000	26.860	.768	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

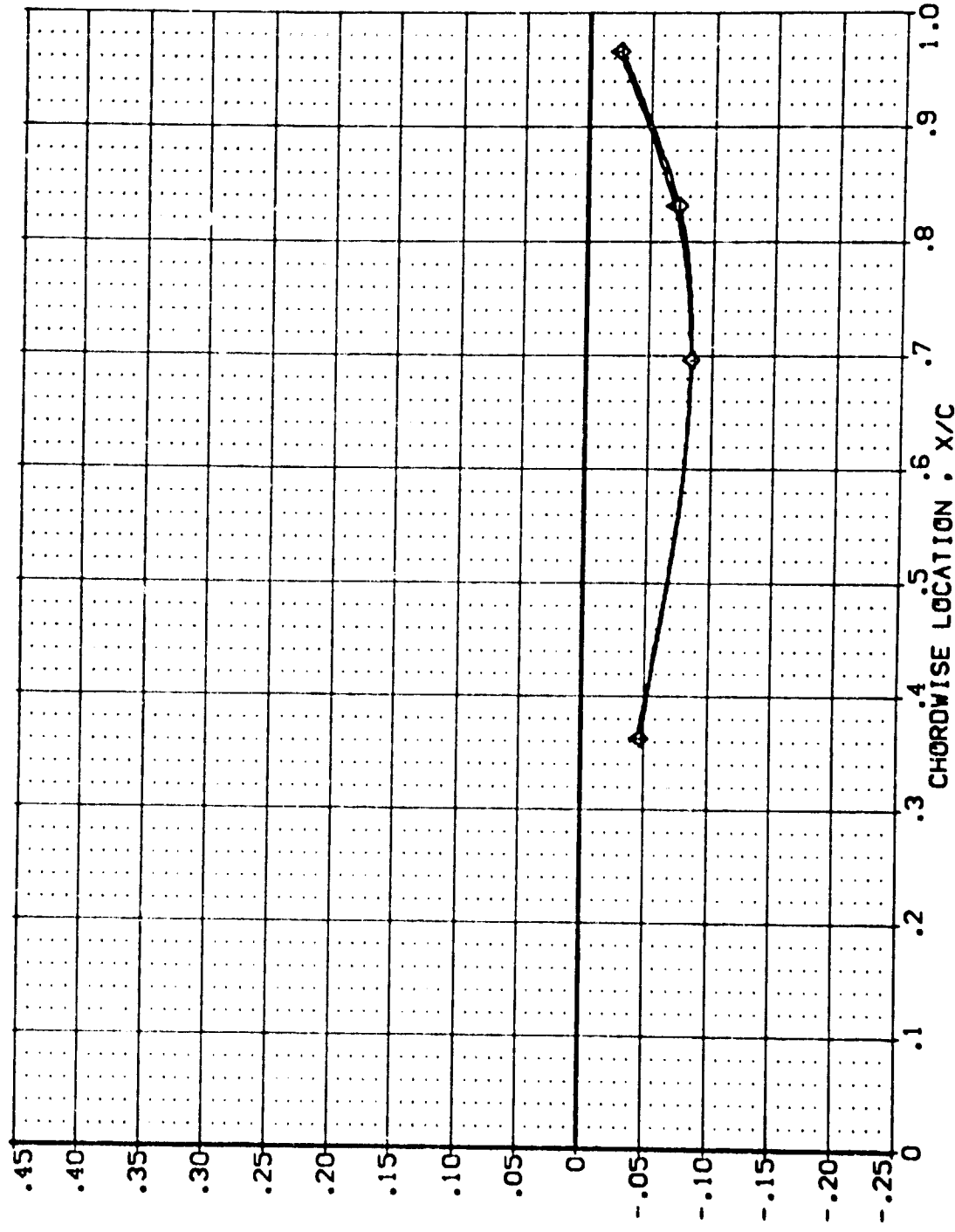
MACH = 3.000 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZD038)
(UBZD041)
(UBZD075)
(UBZD074)

AVES 87-710 [A] 2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 [A] 2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 [A] 2C 01 T1 S4 UPPER WING PRESSURE
AVES 87-710 [A] 2C 01 T1 S4 UPPER WING PRESSURE

POWER DFR SFRPR GIMBAL
.000
1.000 26.860 .768 1.000
1.000 26.860 .768 1.000

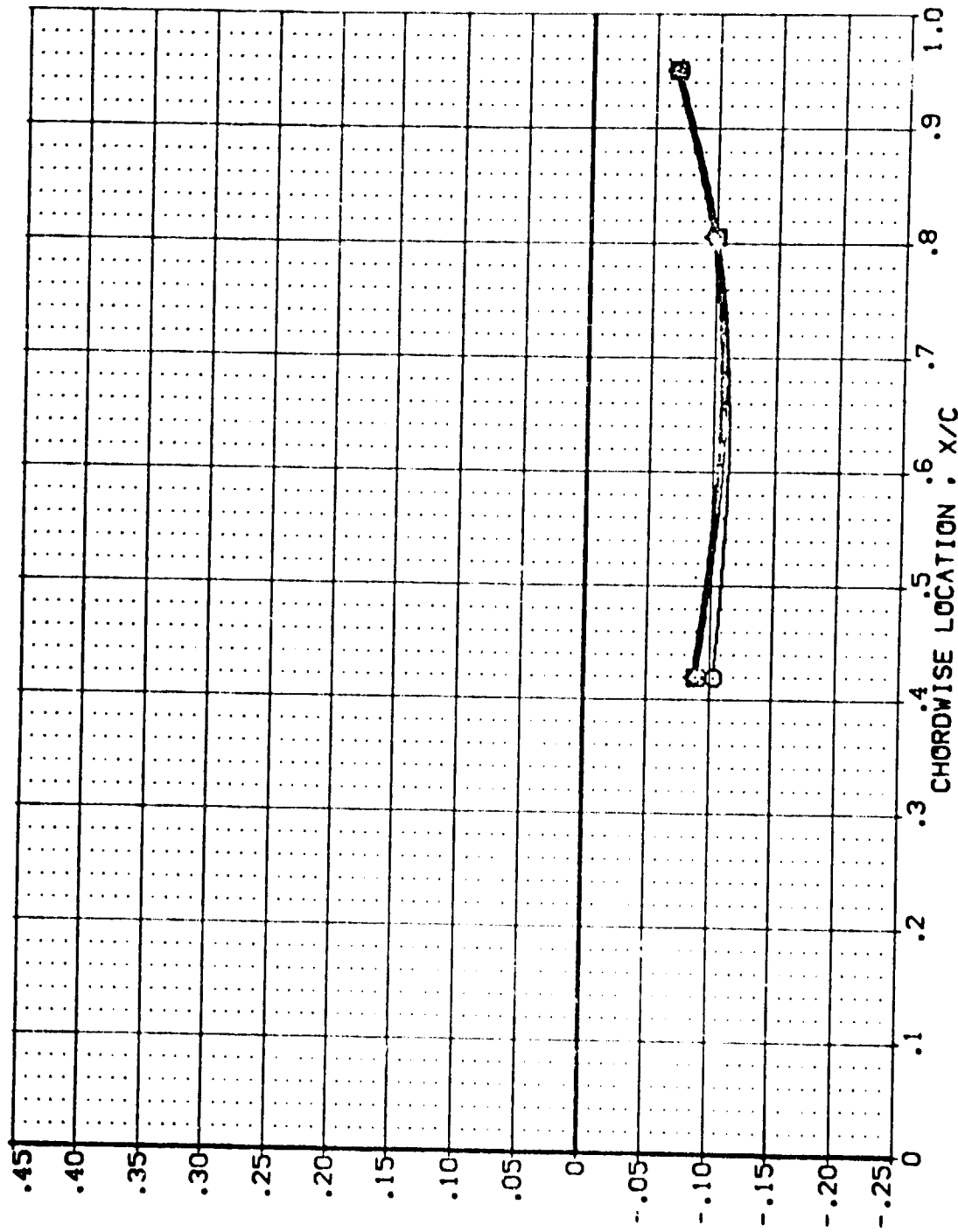


PRESSURE COEFFICIENT • CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .299

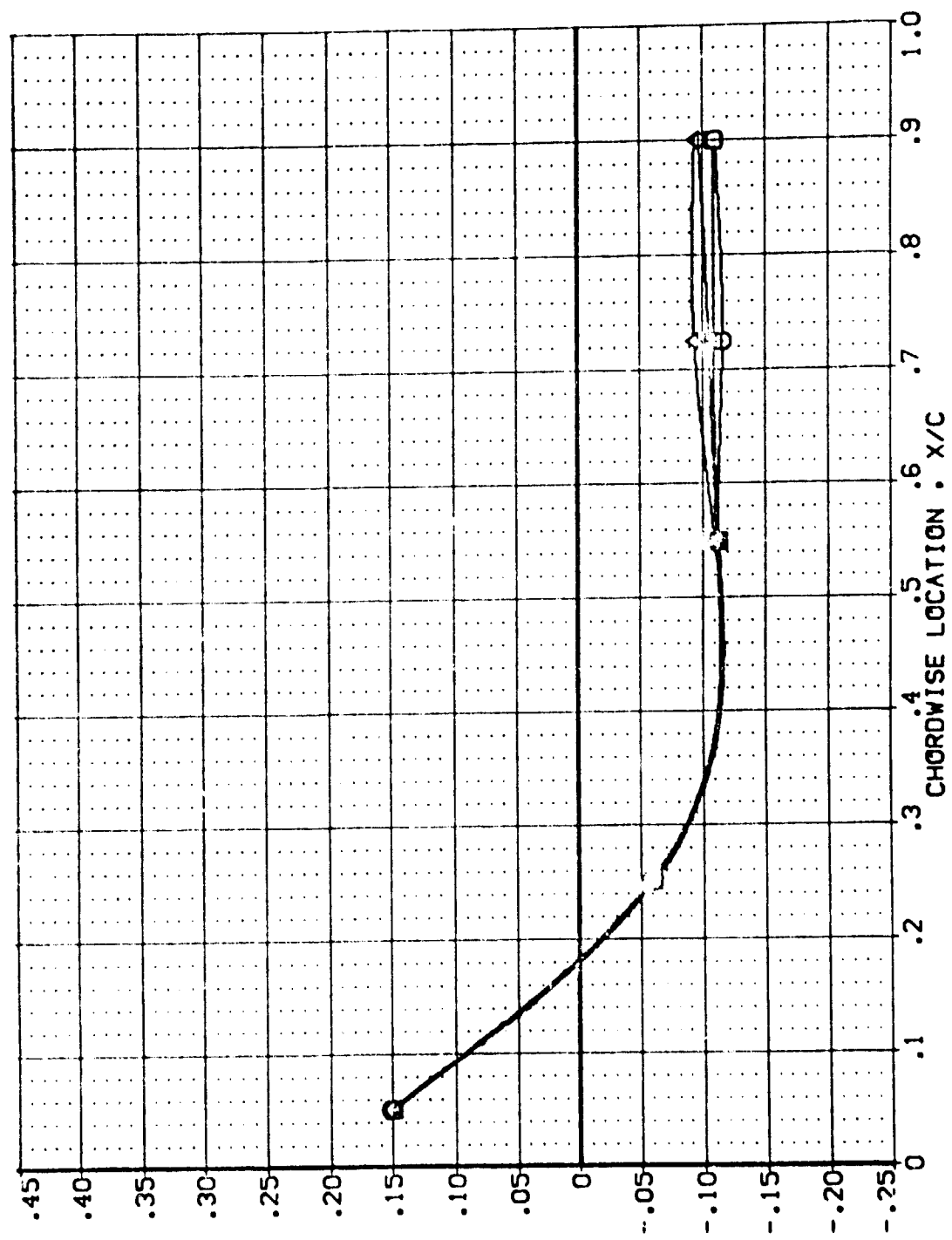
POWER	OPR	SPR	G/MAL
1,000			1,000
1,000	26,650	.768	1,000
1,000			1,000
1,000	26,650	.768	1,000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .427

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SRPR	GIMBAL
(UBZ0038)	AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	1.000	26.860	.768	1.000
(UBZ041)	AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	1.000	26.860	.768	1.000
(UBZ073)	AMES 87-710 IAI2C 01 T1 S4 UPPER WING PRESSURE	1.000	26.860	.768	1.000
(UBZ074)	AMES 87-710 IAI2C 01 T1 S4 UPPER WING PRESSURE	1.000	26.860	.768	1.000



PRESSURE COEFFICIENT • CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

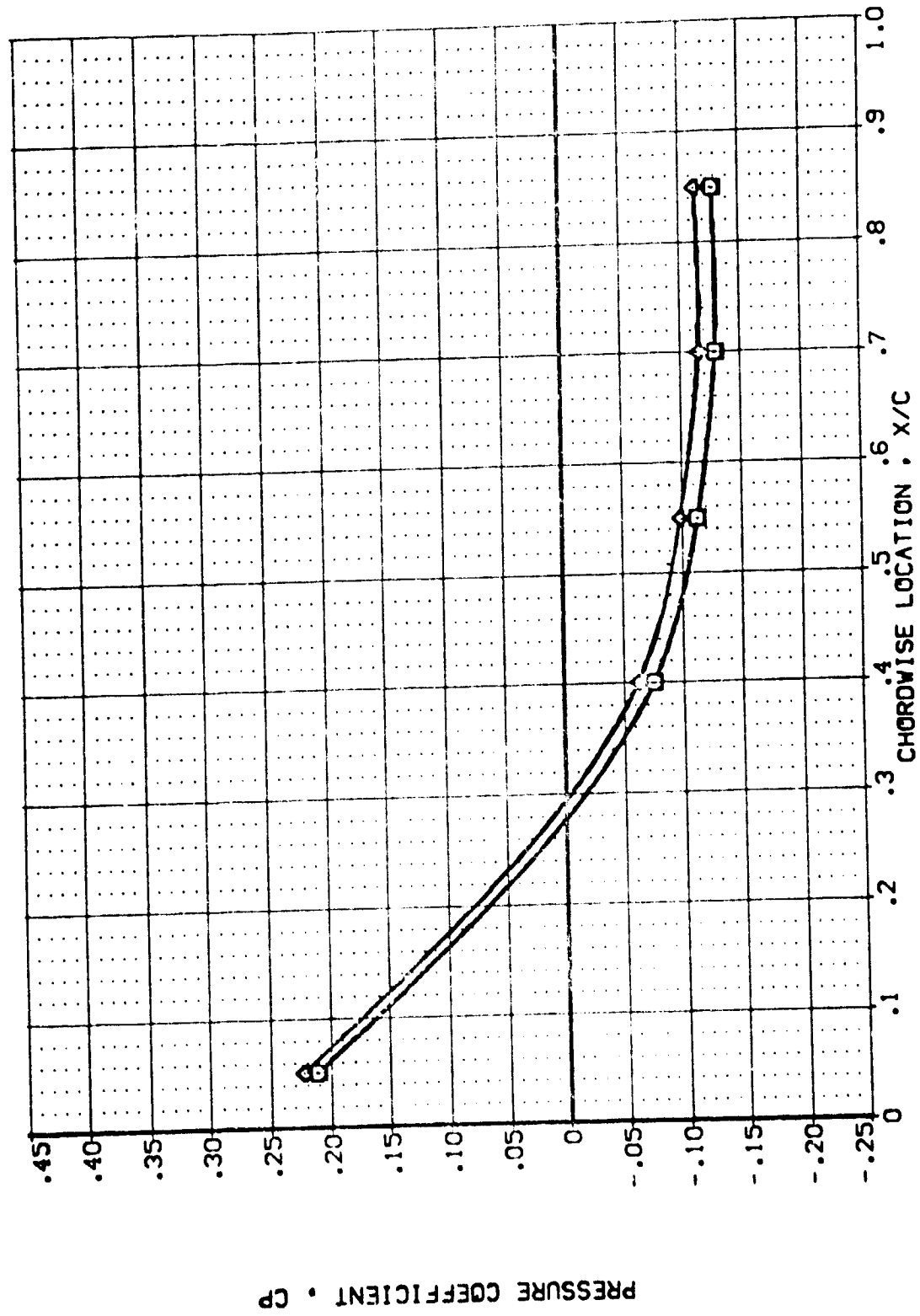
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ038)	AVES 87-710	IA12C 01	TI	SI	UPPER WING PRESSURE
(UBZ041)	AVES 87-710	IA12C 01	TI	SI	UPPER WING PRESSURE
(UBZ075)	AVES 87-710	IA12C 01	TI	SI	UPPER WING PRESSURE
(UBZ074)	AVES 87-710	IA12C 01	TI	SI	UPPER WING PRESSURE

POWER 0.000
 1.000
 1.000
 1.000

SR-PR .768
 .768
 .768

GIMBAL 1.000
 1.000
 1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .673

DATA SET SYMBOL

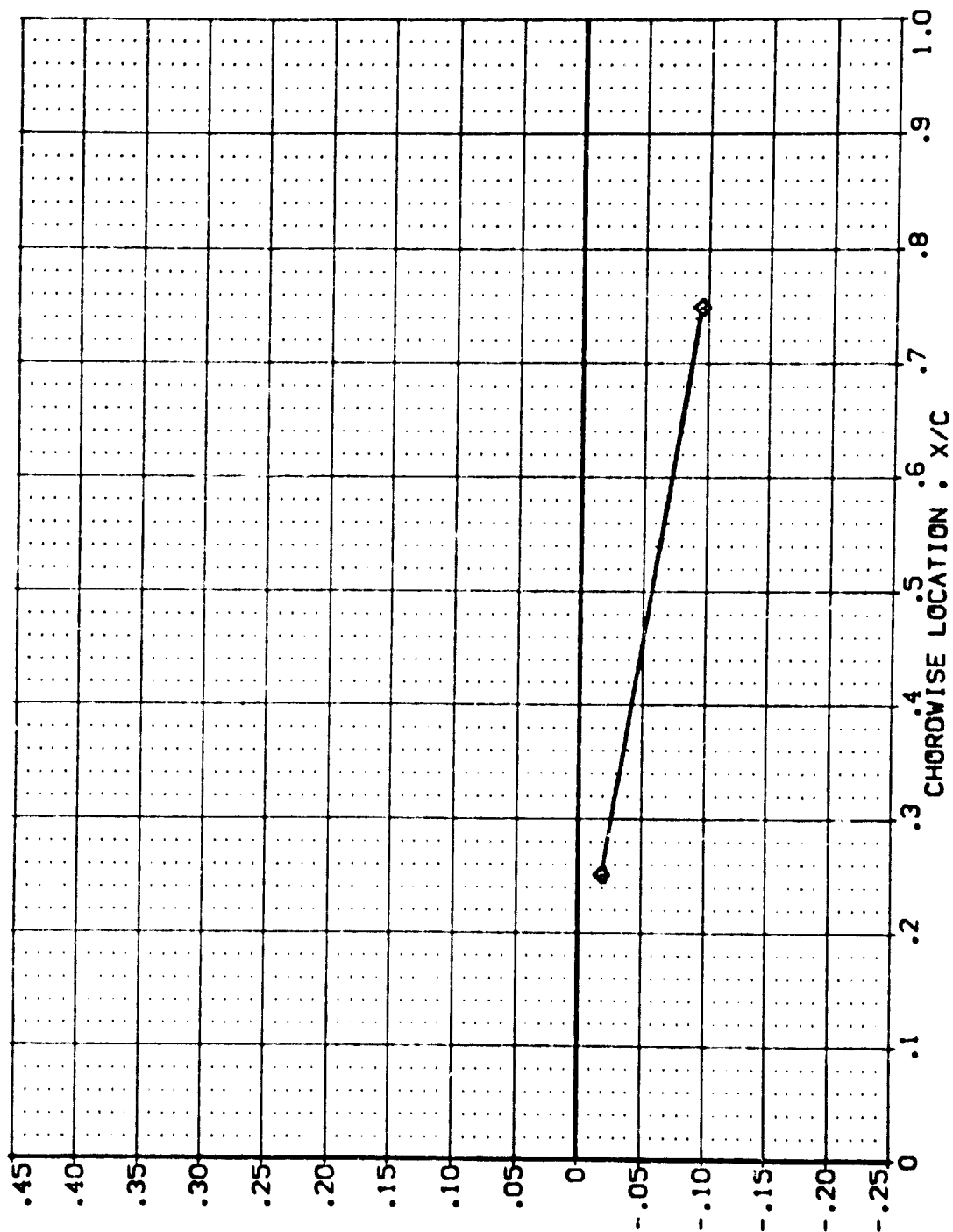
(LB2038)
(LB2041)
(LB2075)
(LB2074)



CONFIGURATION DESCRIPTION
AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S4 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S4 UPPER WING PRESSURE

POWER 0.000
DPR 26.860
SRPR .768
GIMBAL 1.000
1.000
1.000
1.000

PRESSURE COEFFICIENT - CP



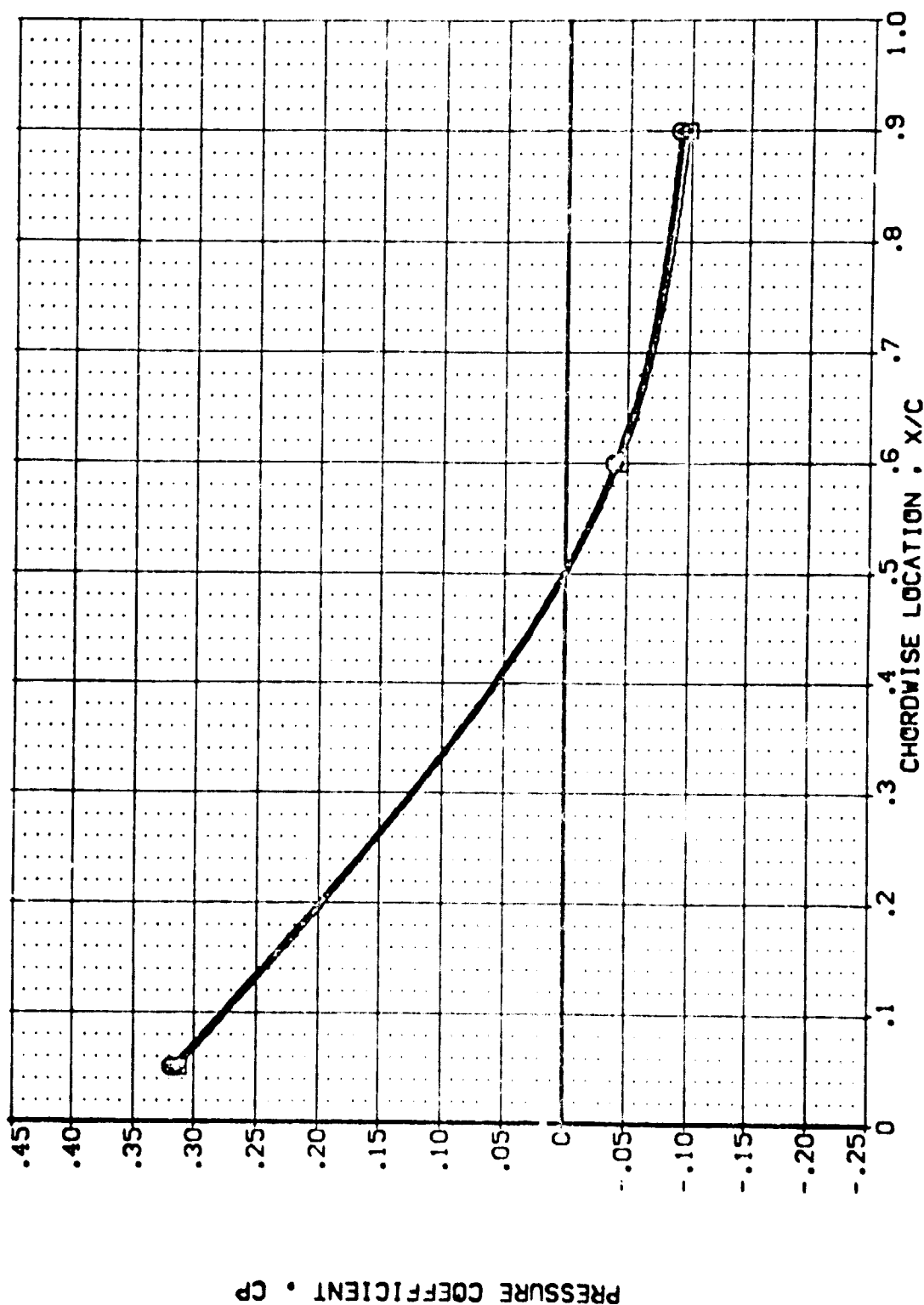
PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .780

(U82038)
(U82041)
(U82075)
(U82074)

VES	77-710	1A12C	01	T1	S1	UPPER	VING	PRESSURE
AVES	77-710	1A12C	01	T1	S1	UPPER	VING	PRESSURE
AVES	77-710	1A12C	01	T1	S4	UPPER	VING	PRESSURE
AVES	77-710	1A12C	01	T1	S4	UPPER	VING	PRESSURE

POWER	CFR	SGPR	GIMBAL
.000			1.000
1.000	26.833	.758	1.000
.000			1.000
1.000	26.860	.758	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

$$\text{MACH} = 3.000 \quad \text{ALPHA} = .000 \quad \text{Y/B} = .887$$

PAGE 210

DATA SET SYMBOL

[UB2038]
[UB2041]
[UB2075]
[UB2074]

CONFIGURATION DESCRIPTION

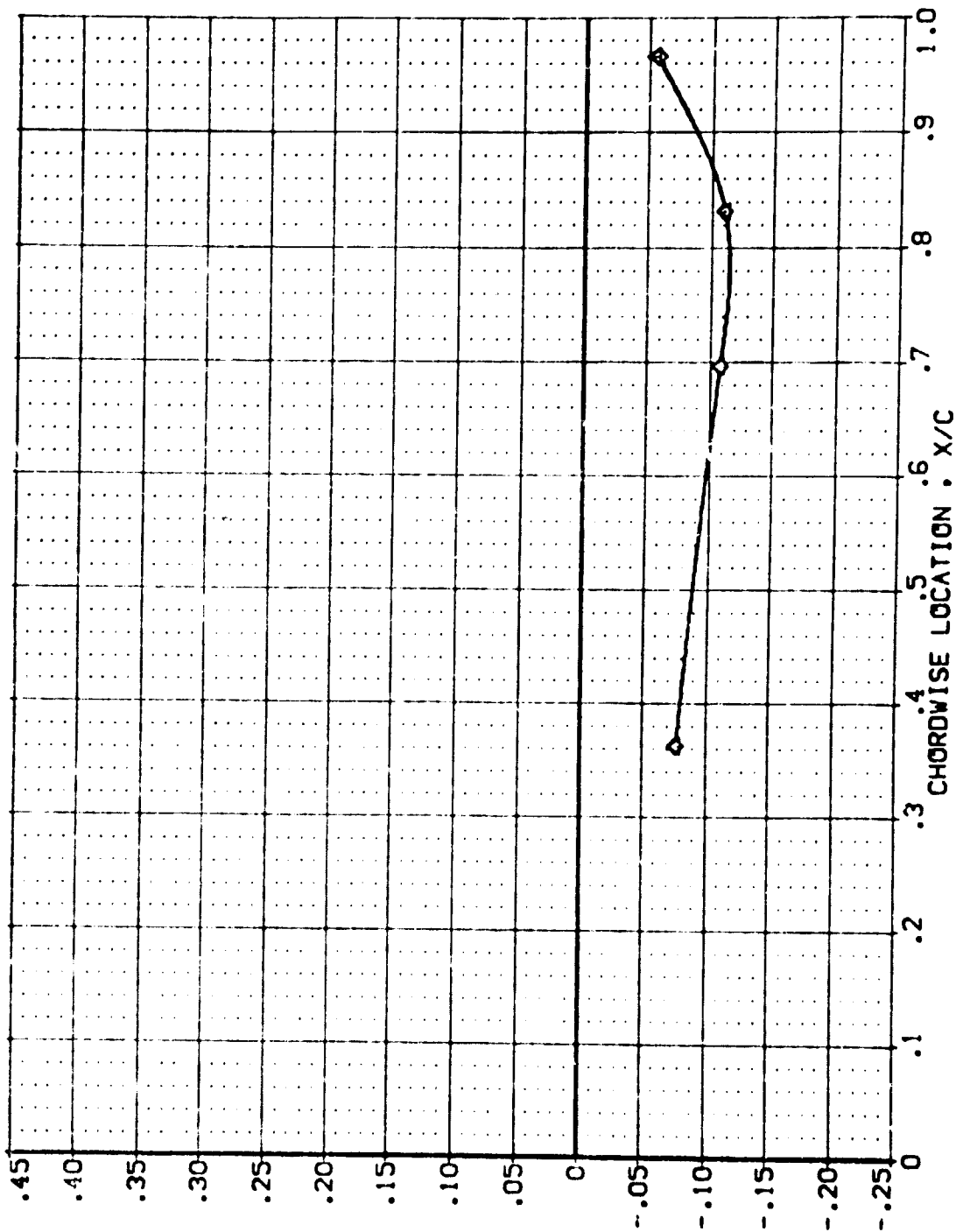
AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE
AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE
AMES 87-710 [A12C 01 T1 S4] UPPER WING PRESSURE
AMES 87-710 [A12C 01 T1 S4] UPPER WING PRESSURE

POWER .000
1.000
1.000
1.000
1.000

CAR 26.850
26.850

SRPR .768
.768

01MBAL
1.000
1.000
1.000
1.000



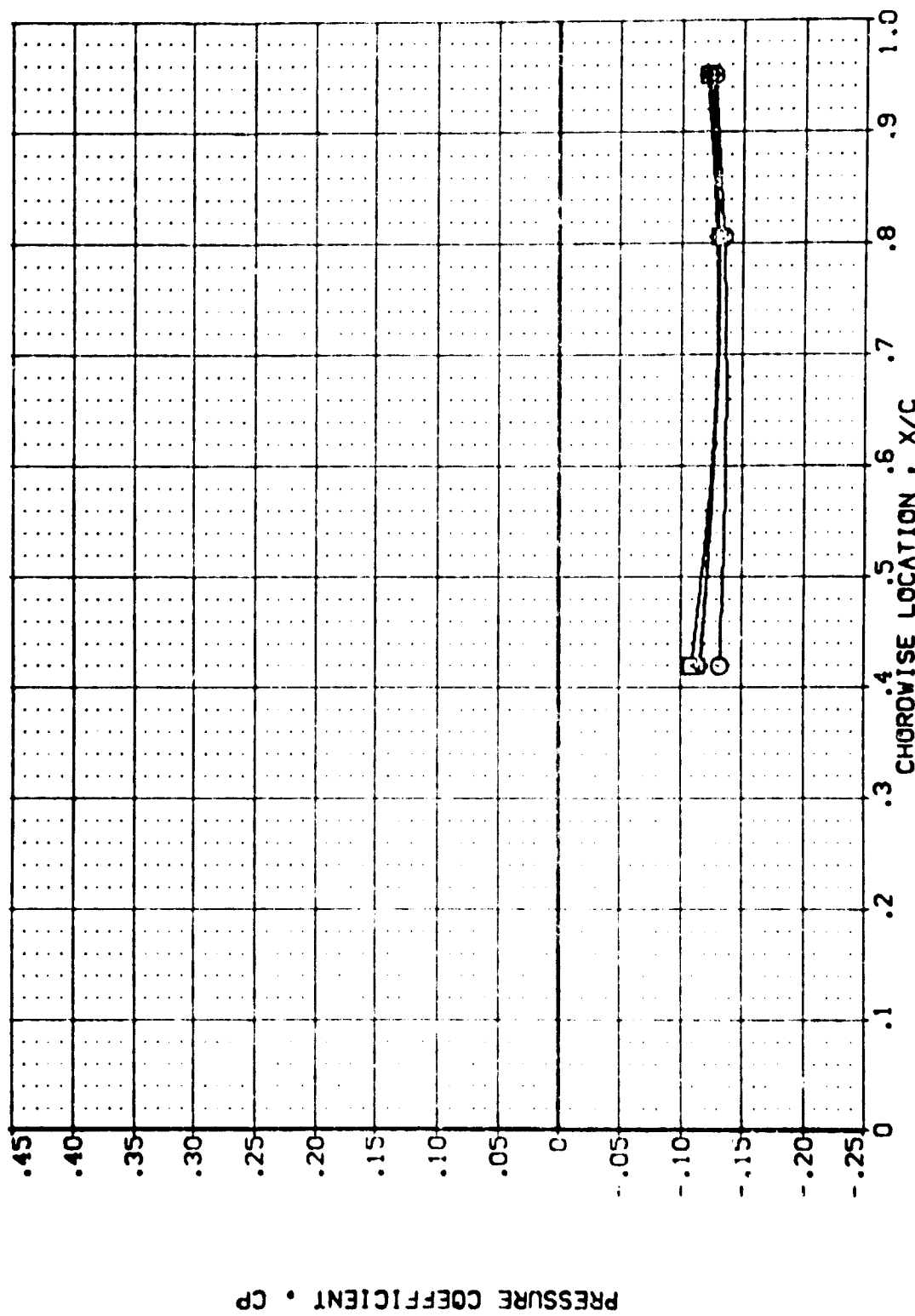
PRESSURE COEFFICIENT • CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UB2008) ASES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (UB2041) ASES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (UB2073) ASES 87-710 1A12C 01 T1 S4 UPPER WING PRESSURE
 (UB2074) ASES 87-710 1A12C 01 T1 S4 UPPER WING PRESSURE

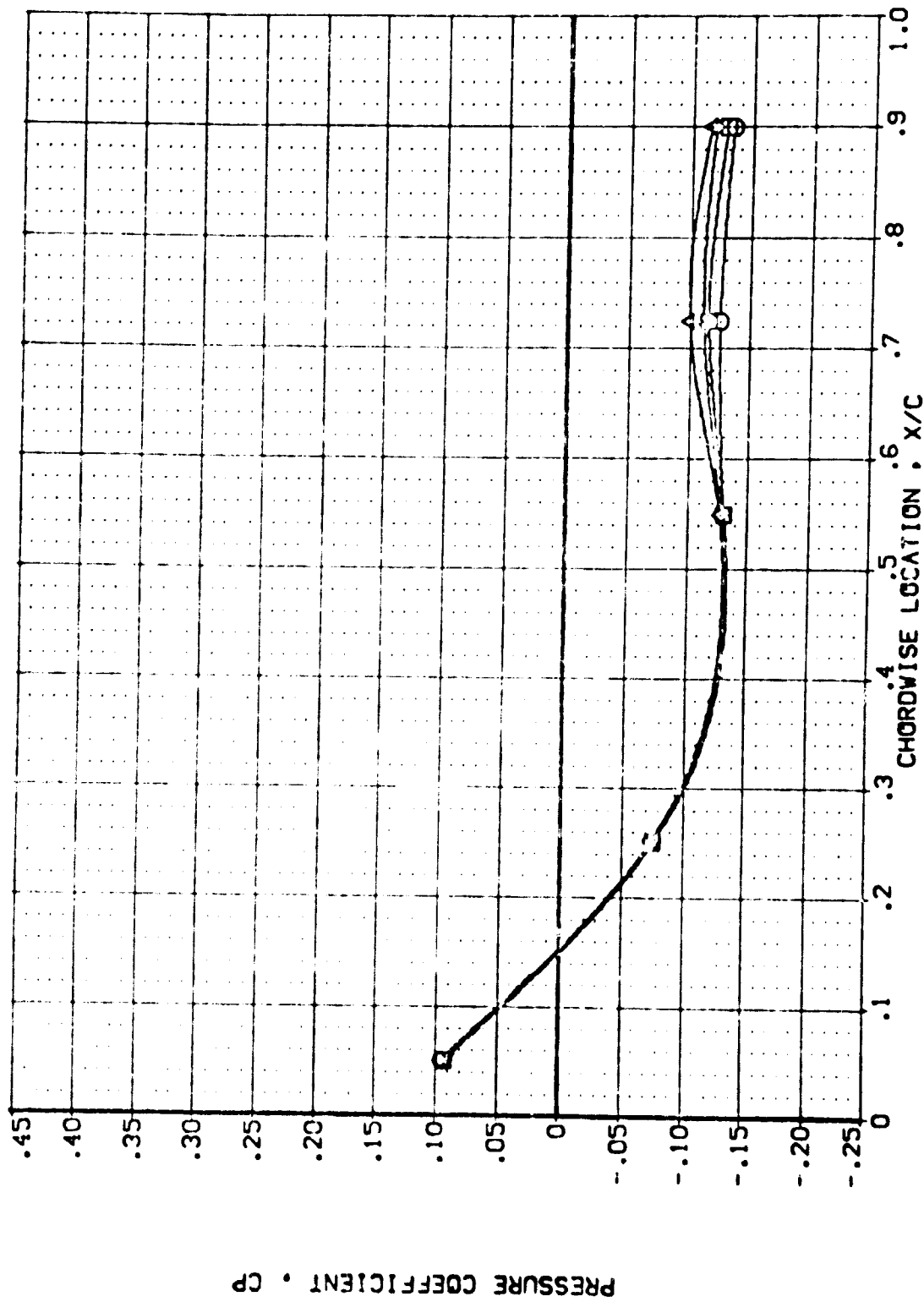
POWER 0.000 1.000
 DFR 26.860 26.860
 SP-PR .768 .768
 GIMBAL 1.000 1.000 1.000 1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .427 PAGE 212

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CFR	SMFR	QINBAL
AVES 67-710	AI 2C 01 T1 S1	UPPER WING PRESSURE	.000		1.000
AVES 67-710	AI 2C 01 T1 S1	UPPER WING PRESSURE	1.000	.768	1.000
AVES 67-710	AI 2C 01 T1 S4	UPPER WING PRESSURE	.000		1.000
AVES 67-710	AI 2C 01 T1 S4	UPPER WING PRESSURE	1.000	.768	1.000

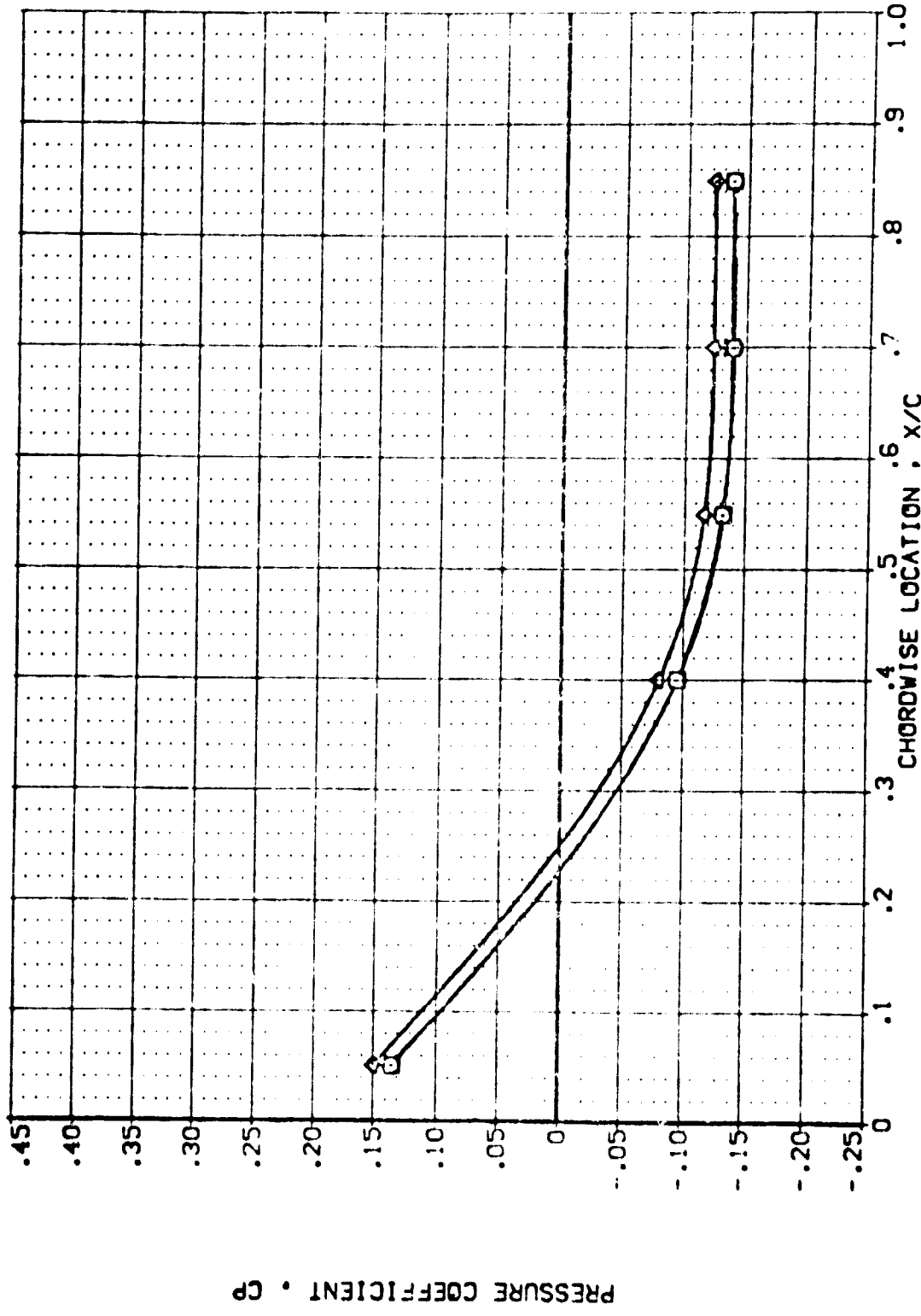


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ038)	Q	AVES 87-710	IA12C 01 TI SI	UPPER WING PRESSURE	POWER	OPR	SRFA	Q1MBAL
(UBZ041)		AVES 87-710	IA12C 01 TI SI	UPPER WING PRESSURE	1.000	26.860	.758	1.000
(UBZ075)	X	AVES 87-710	IA12C 01 TI SA	UPPER WING PRESSURE	1.000			1.000
(UBZ074)	Z	AVES 87-710	IA12C 01 TI SA	UPPER WING PRESSURE	1.000	26.860	758	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .673 PAGE 214

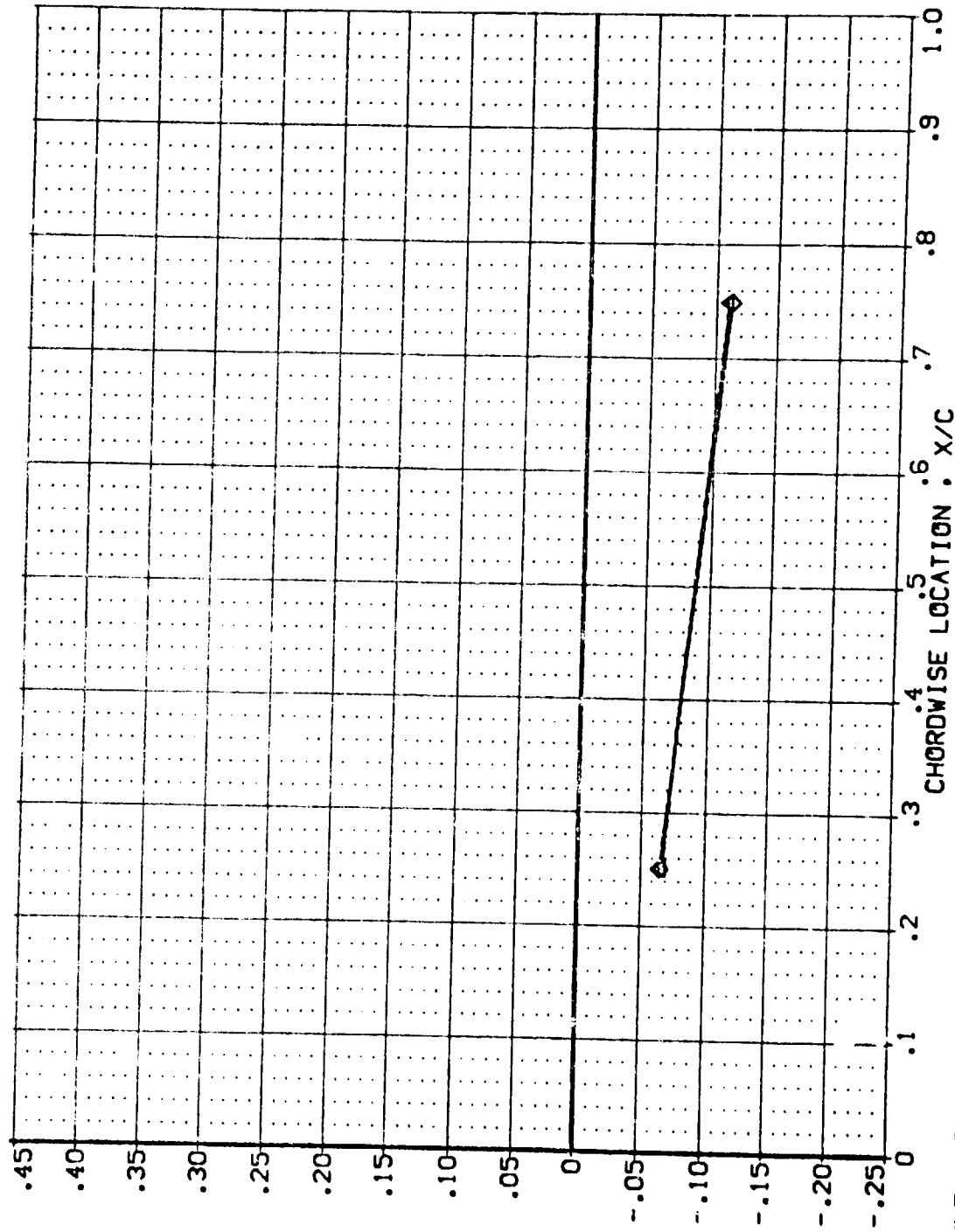
DATA SET SYMBOL

(U67038)
(U67039)
(U67073)
(U67074)

CONFIGURATION DESCRIPTION

AVES 87-710 IAI2C OI T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C OI T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C OI T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C OI T1 S1 UPPER WING PRESSURE

POWER .000 .000 .000 .000
DPR 26.660 26.660 .768 .768
SGR PR 01MBAL 01MBAL 01MBAL 01MBAL



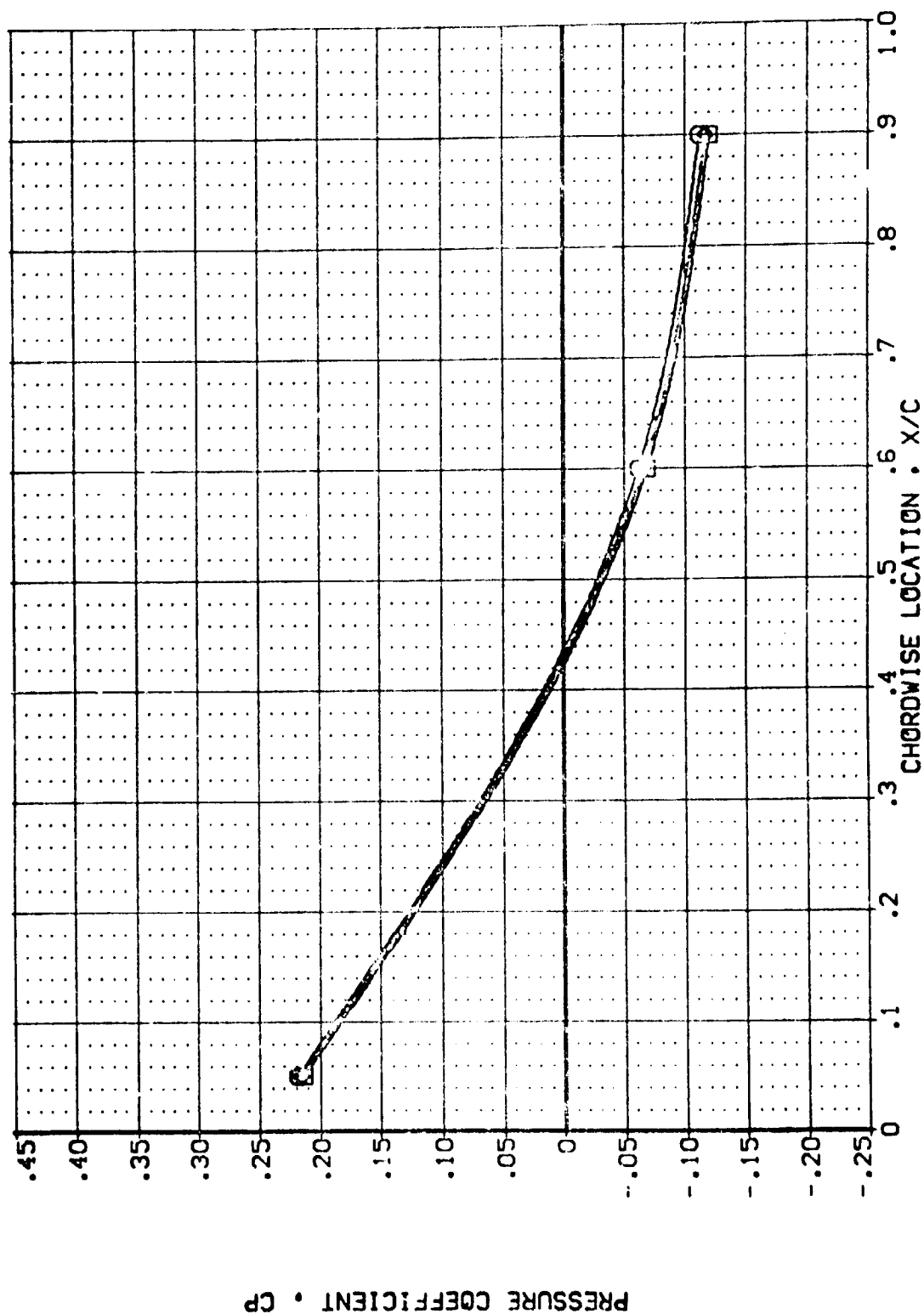
PRESSURE COEFFICIENT, CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER G/R SRRR G/MGAL

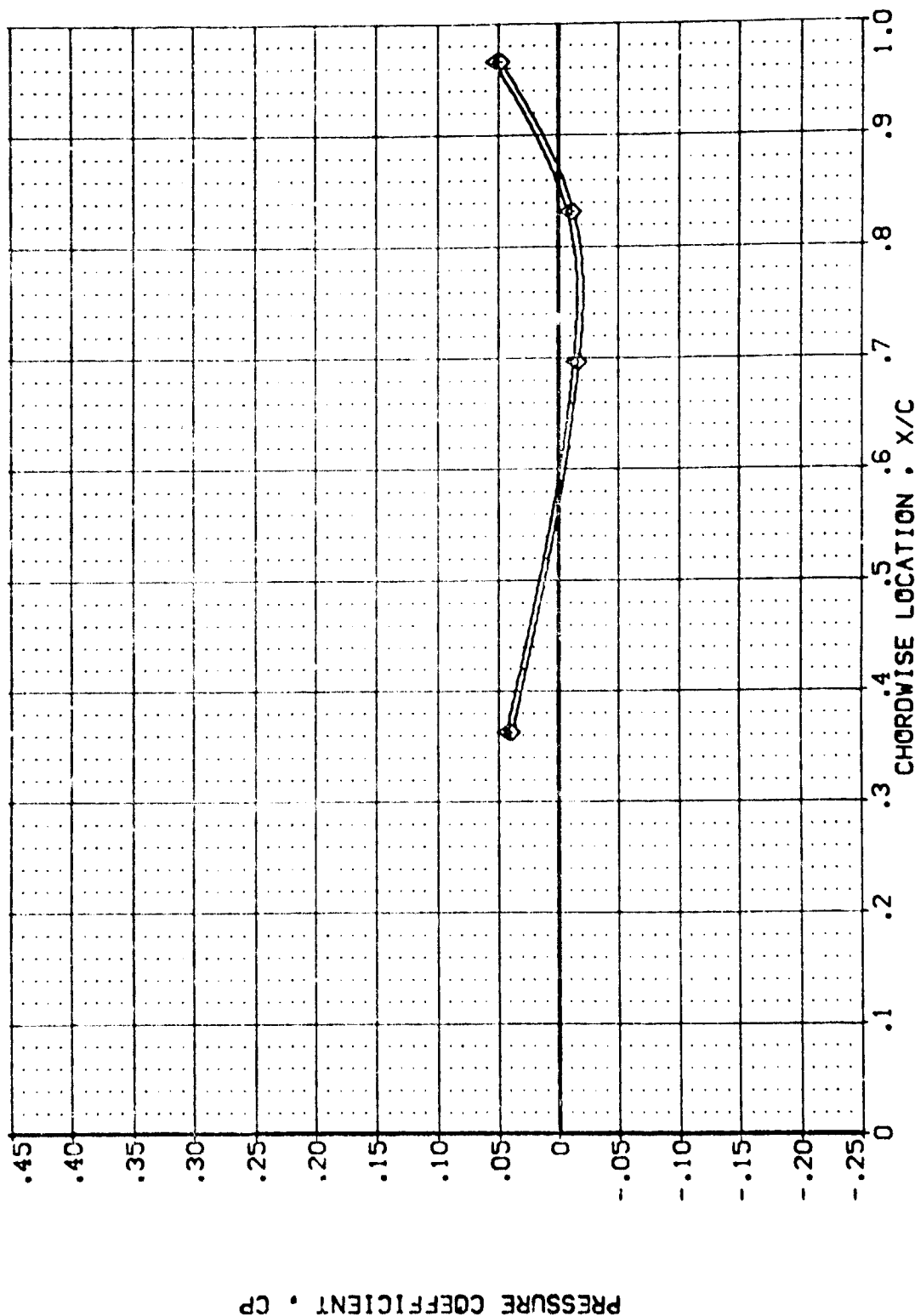
(UB2008)	AVES 87-710	IA12C 01 T1 S1	UPPER WING PRESSURE	1.000	26.860	.768	1.000
(UB2041)	AVES 87-710	IA12C 01 T1 S1	UPPER WING PRESSURE	1.000	26.860	.768	1.000
(UB2075)	AVES 87-710	IA12C 01 T1 S1	UPPER WING PRESSURE	1.000	26.860	.768	1.000
(UB2074)	AVES 87-710	IA12C 01 T1 S1	UPPER WING PRESSURE	1.000	26.860	.768	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	C/R	SWPR	GIMBAL
(UJ2046)	AMES 87-710 IAI2C 01 T1 S1	1.000	23.860	.826	1.000
(UJ2047)	AMES 87-710 IAI2C 01 T1 S1	1.000	23.860	.826	1.000
(UJ2048)	AMES 87-710 IAI2C 01 T1 S1	1.000	23.860	.826	1.000

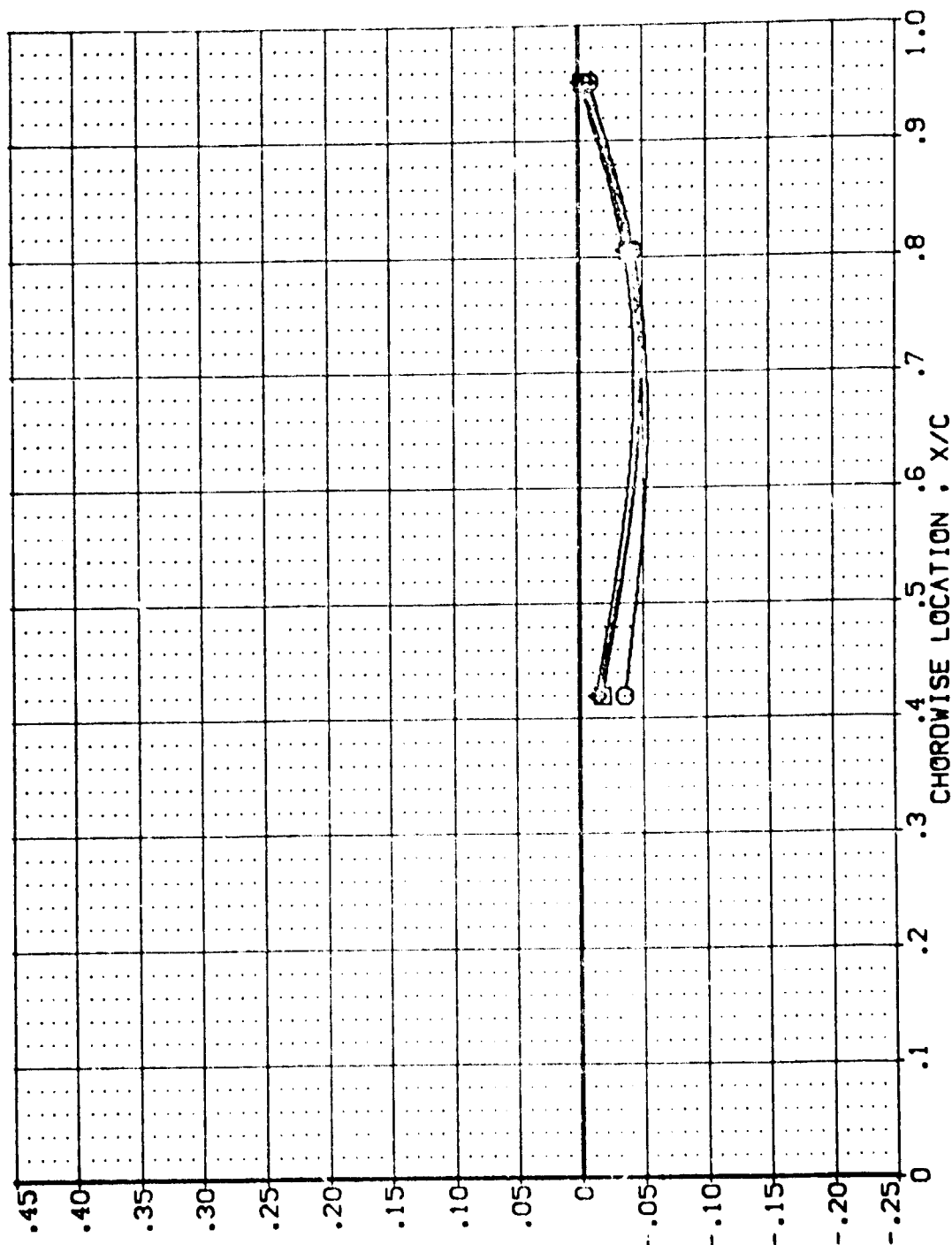


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .299

PAGE 217

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	DPR	SR/PR	GIMBAL
(UB2046)	AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UB2050)	AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UB2077)	AVES 87-710 [A12C 01 T1 S4] UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UB2076)	AVES 87-710 [A12C 01 T1 S4] UPPER WING PRESSURE	1.000	23.860	.826	1.000



PRESSURE COEFFICIENT - CP

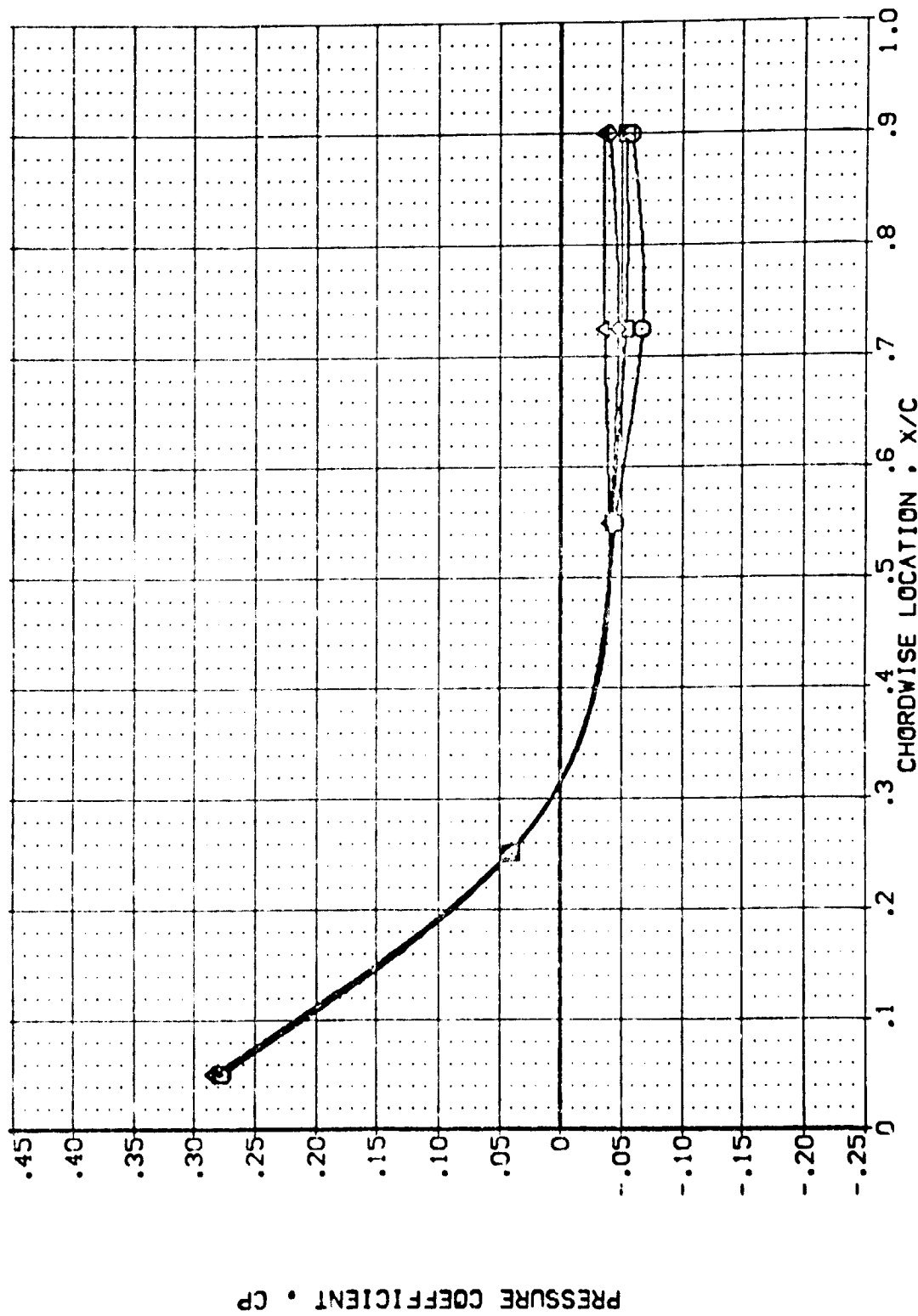
PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .427

PAGE 218

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LH2046)	AMES 87-710	AI2C	01	TI	SI	UPPER WING PRESSURE	POWER	0.00	SRPR	013AL
(LH2047)	AMES 87-710	AI2C	01	TI	SI	UPPER WING PRESSURE	1.000	1.000	.826	1.000
(LH2077)	AMES 87-710	AI2C	01	TI	SI	UPPER WING PRESSURE	1.000	1.000	.826	1.000
(LH2076)	AMES 87-710	AI2C	01	TI	SI	UPPER WING PRESSURE	1.000	1.000	.826	1.000

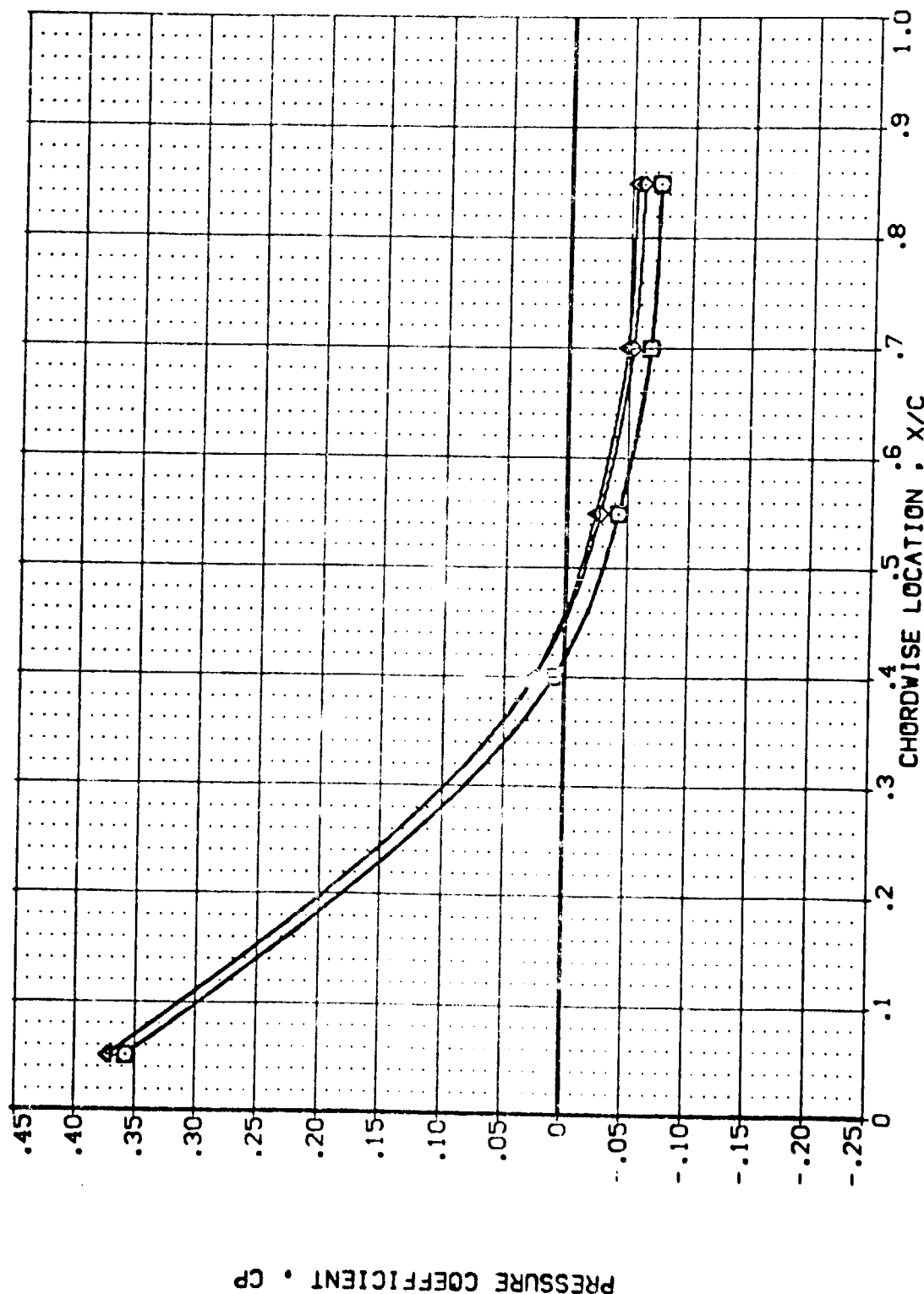


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -3.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ046)	AVES 87-710	IA12C	01	T1	SI	UPPER WING PRESSURE	POWER	C/R	SN-PR	GINBAL
(UBZ050)	AVES 87-710	IA12C	01	T1	SI	UPPER WING PRESSURE	.000	23.860	.826	1.000
(UBZ077)	AVES 87-710	IA12C	01	T1	SA	UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UBZ076)	AVES 87-710	IA12C	01	T1	SA	UPPER WING PRESSURE	1.000	23.860	.826	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .673

(U87046)
 (U87050)
 (U87077)
 (U87076)

CONFIGURATION DESCRIPTION

87-710 S3
87-710 S3
87-710 S3
87-710 S3

111111
222222
333333
444444
555555

UPPER VINING PRESURE
UPPER VINING PRESURE
UPPER VINING PRESURE
UPPER VINING PRESURE

REF

8888
-1-

2

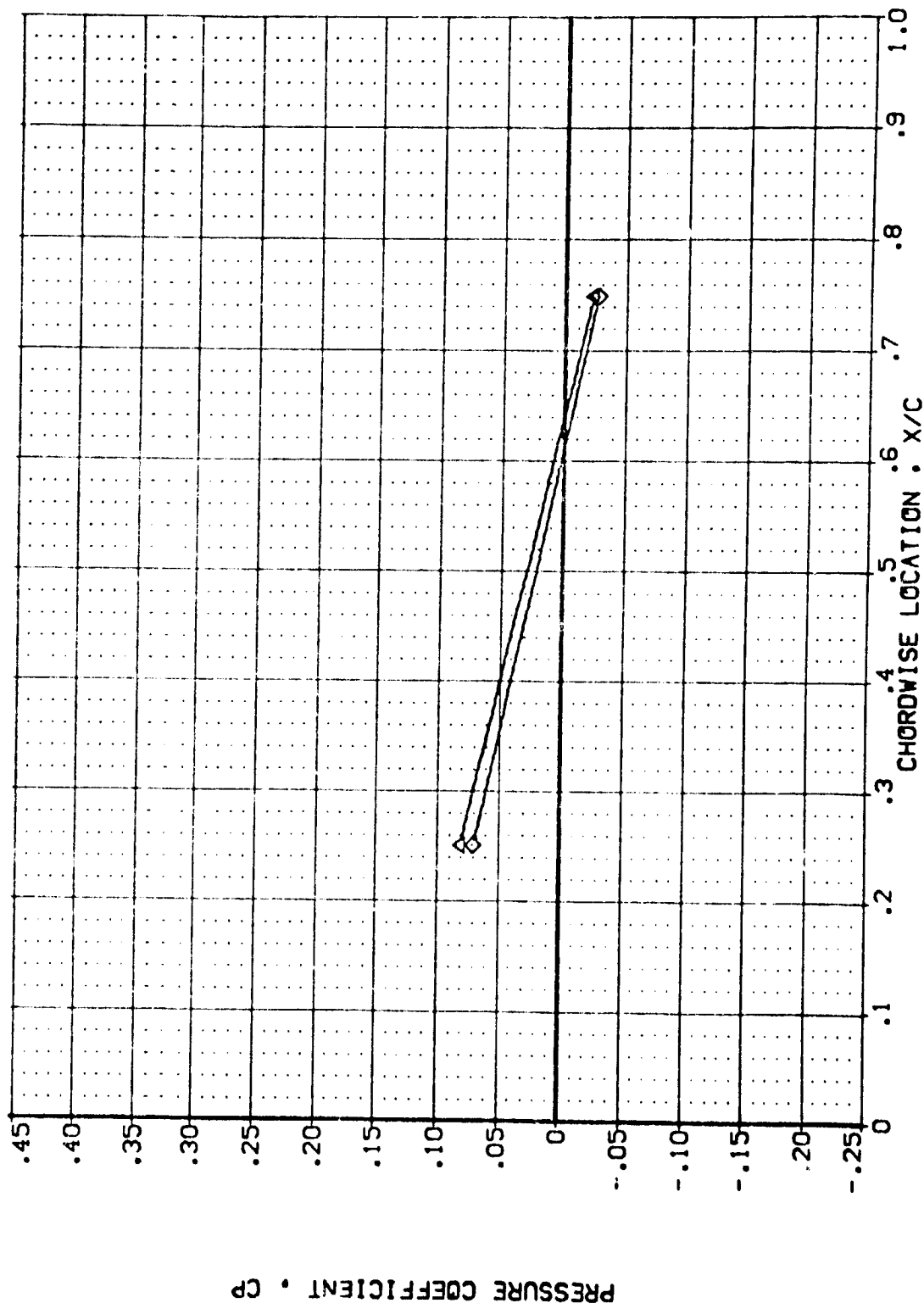
23.8 23.8 23.8

Case 1

528

10612

1.000	1.000	1.000
1.000	1.000	1.000
1.000	1.000	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

$$\text{MACH} = 3.500 \quad \text{ALPHA} = -8.000 \quad \text{Y/B} = .780$$

PAGE 221

221

DATA SET SYMBOL

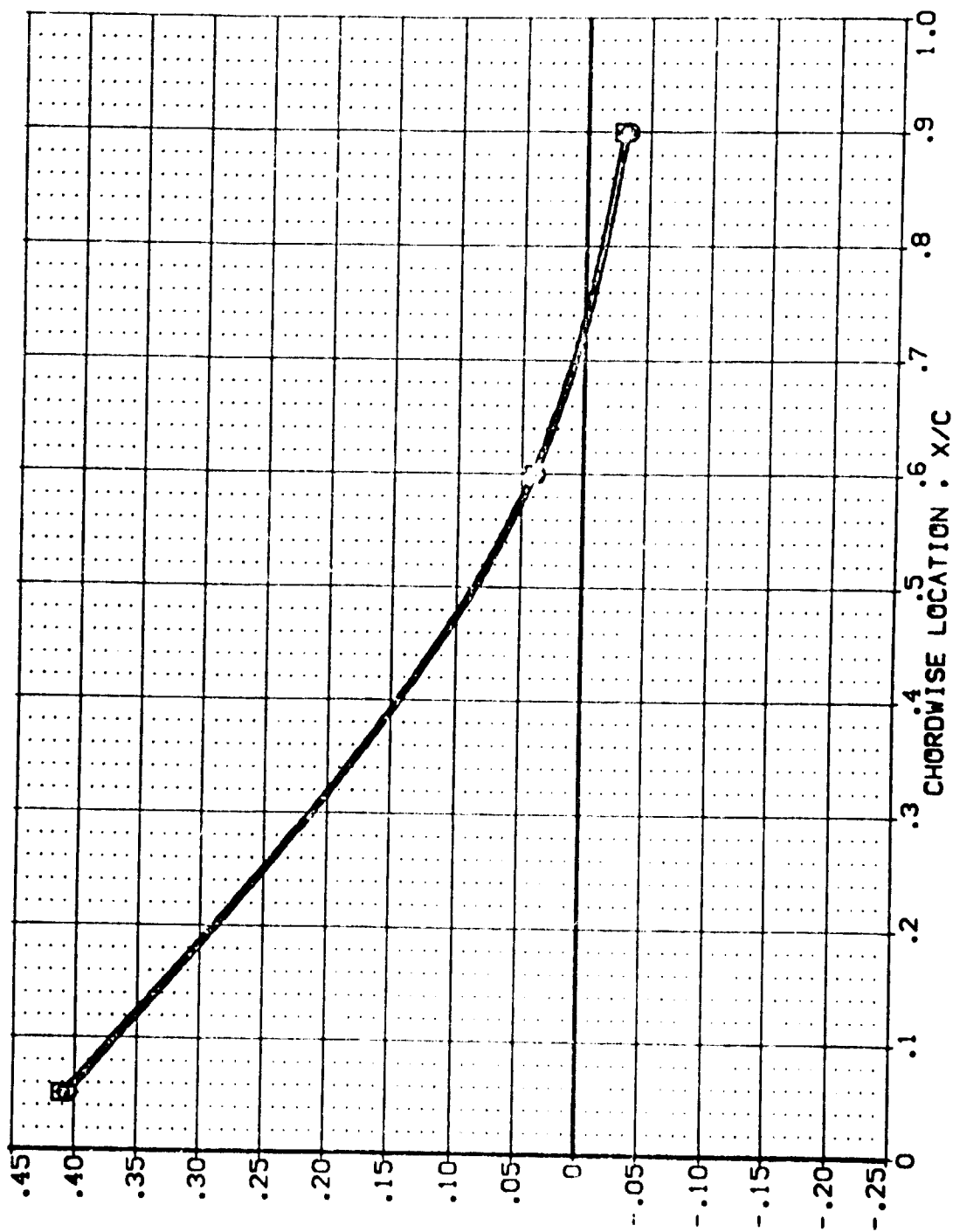
(UBZD46)
(UBZD50)
(UBZD77)
(UBZD76)

CONFIGURATION DESCRIPTION

AVES 87-710 IAI2C 01 TI SI UPPER WING PRESSURE
AVES 87-710 IAI2C 01 TI SI UPPER WING PRESSURE
AVES 87-710 IAI2C 01 TI SI UPPER WING PRESSURE
AVES 87-710 IAI2C 01 TI SI UPPER WING PRESSURE

POWER 0.000
0.000
0.000
1.000
SRPR .826
0.826
0IMBAL 1.000
1.000
1.000

PRESSURE COEFFICIENT • CP



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

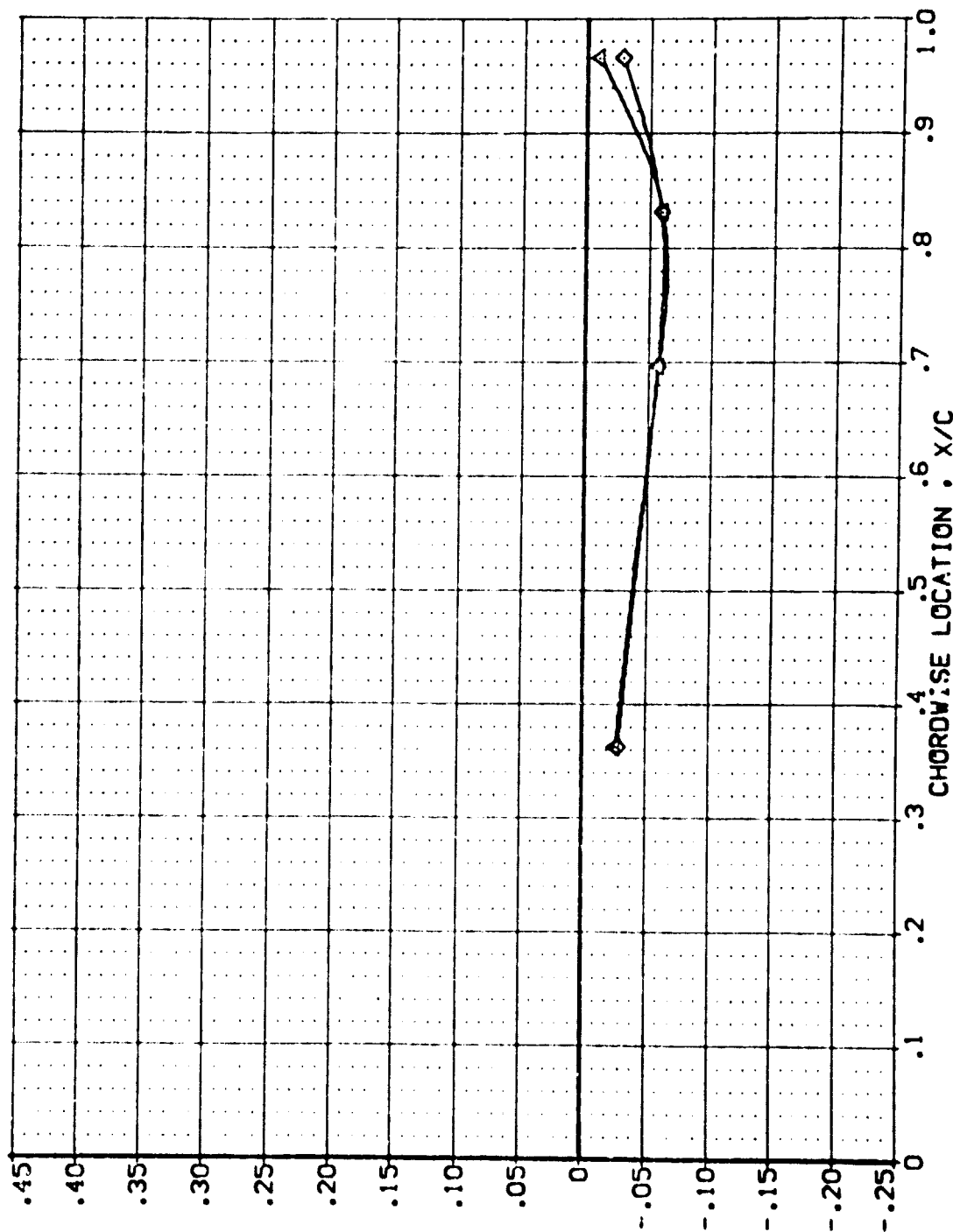
[UB0746]
[UL0750]
[UL0757]
[UL0776]

AYES 87-710
AYES 87-710
AYES 87-710
AYES 87-710

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER DPR SRRR GIMBAL
.000 23.860 .826 1.000
1.000 23.860 .826 1.000
1.000 23.860 .826 1.000
1.000 23.860 .826 1.000



PRESSURE COEFFICIENT, CP

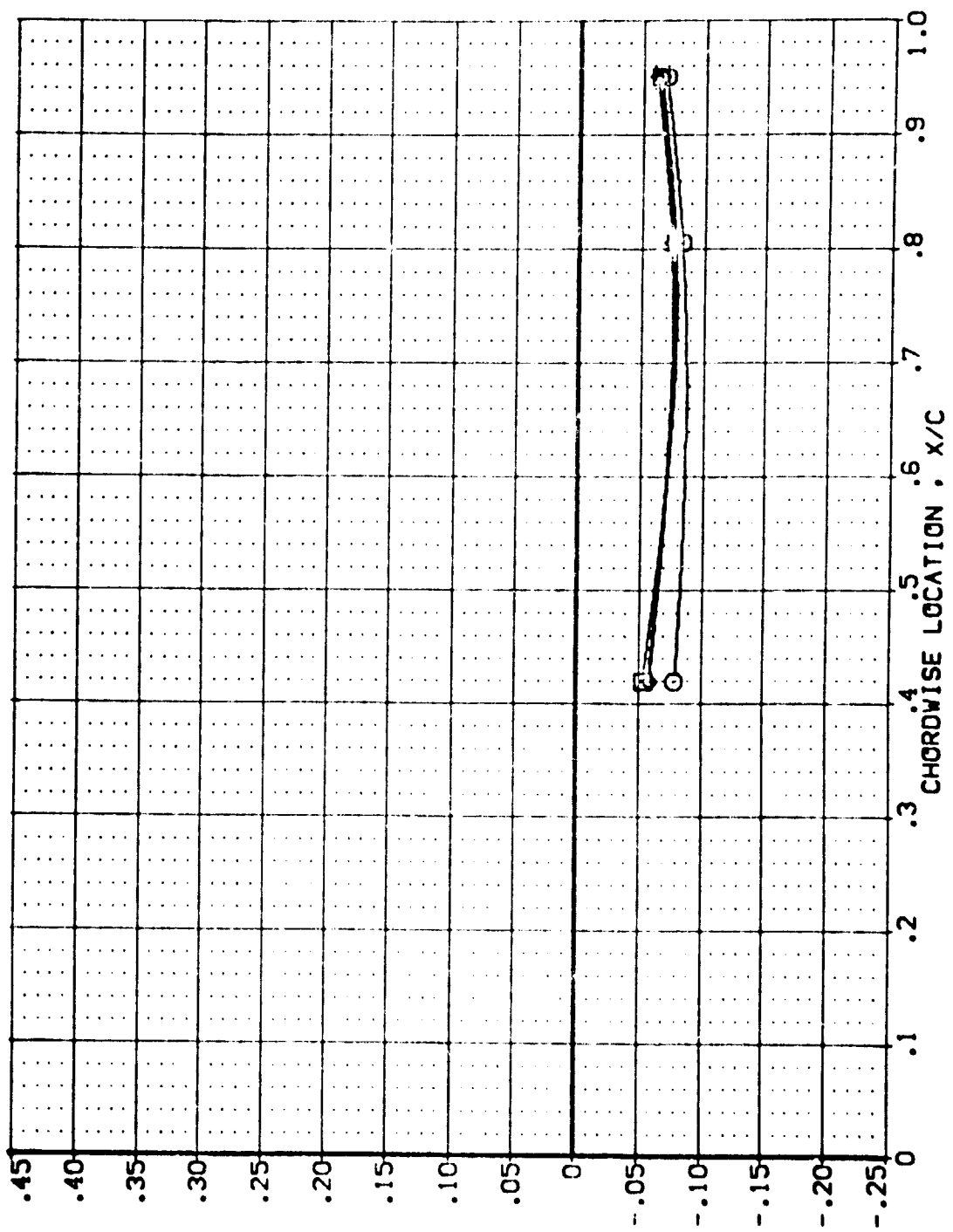
PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UB20046) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UB20050) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UB20077) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UB20076) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER 0.000
 1.000 23.860
 1.000 23.860
 1.000 23.860

SRFR 0.826
 0.826
 0.826

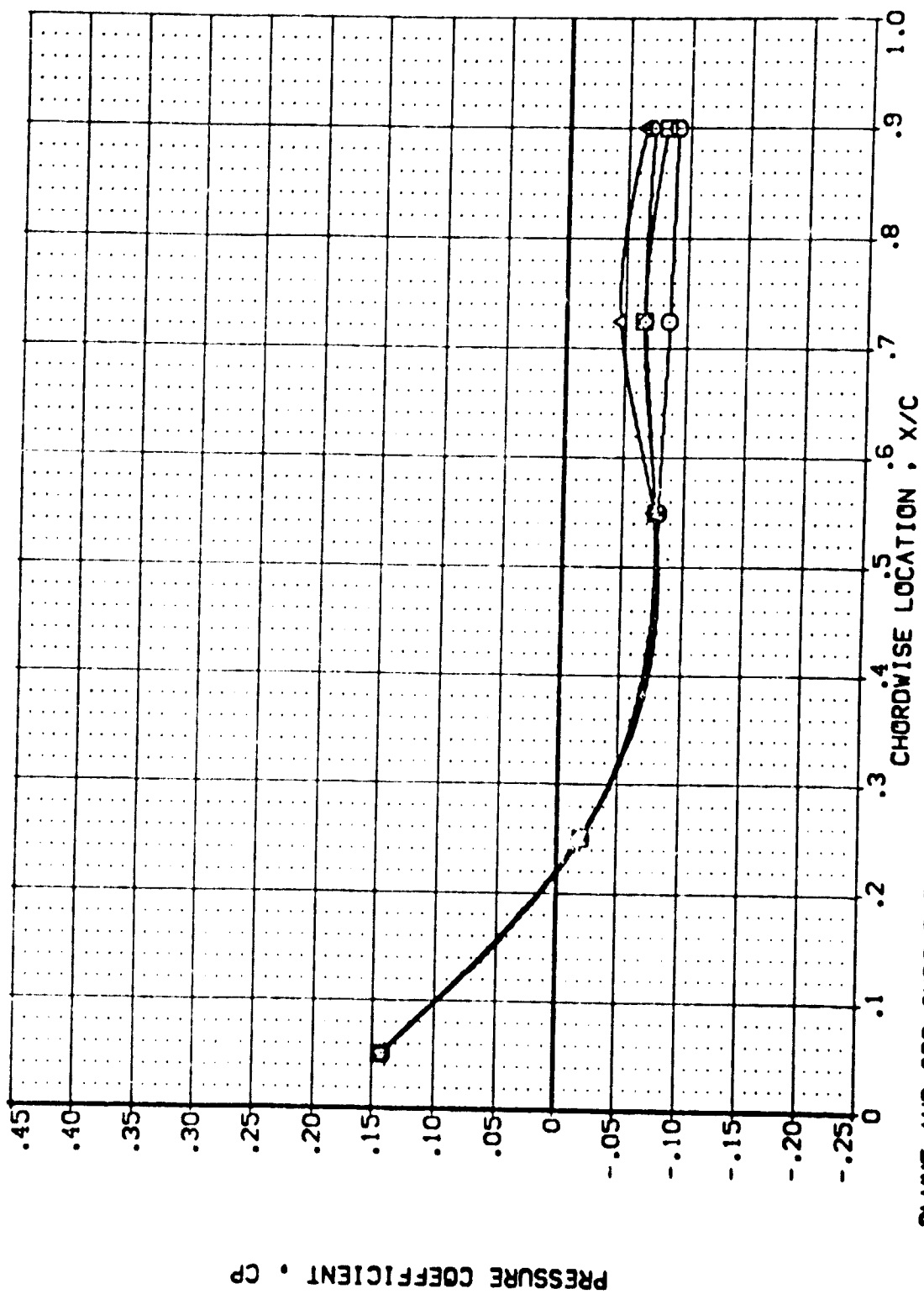


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(URC046)	APES 87-710	AI2C 01	T1	S1	UPPER WING PRESSURE	POWER	OPR	SRPR	GLOBAL
(URC050)	APES 87-710	AI2C 01	T1	S1	UPPER WING PRESSURE	1.000	23.830	.826	1.000
(URC077)	APES 87-710	AI2C 01	T1	S4	UPPER WING PRESSURE	1.000	23.850	.826	1.000
(URC076)	APES 87-710	AI2C 01	T1	S4	UPPER WING PRESSURE	1.000	23.850	.826	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL
 (UB2046)
 (UB2050)
 (UB2077)
 (UB2078)

CONFIGURATION DESCRIPTION
 AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 AYES 87-710 IAI2C 01 T1 S4 UPPER WING PRESSURE
 AYES 87-710 IAI2C 01 T1 S4 UPPER WING PRESSURE

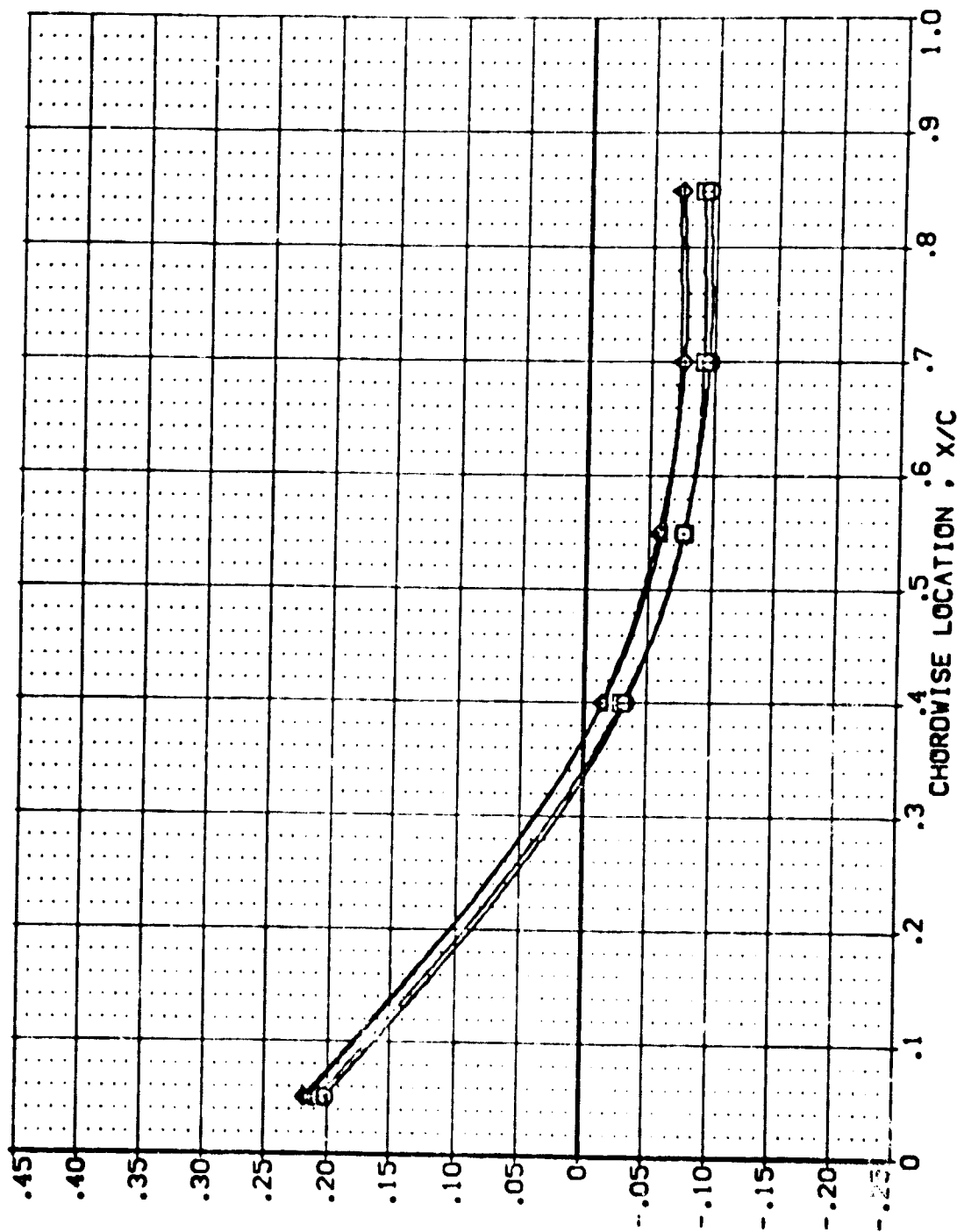
POWER
 .000
 1.000
 1.000
 1.000

OPR
 23.860
 23.860

ST-PR
 .826
 .826

01MBAL
 1.000
 1.000
 1.000

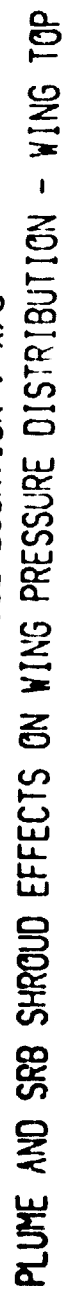
PRESSURE COEFFICIENT, CP



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .673

PRESSURE COEFFICIENT, CP



MACH	=	3.500	ALPHA	=	.000	Y/B	=	.780
------	---	-------	-------	---	------	-----	---	------

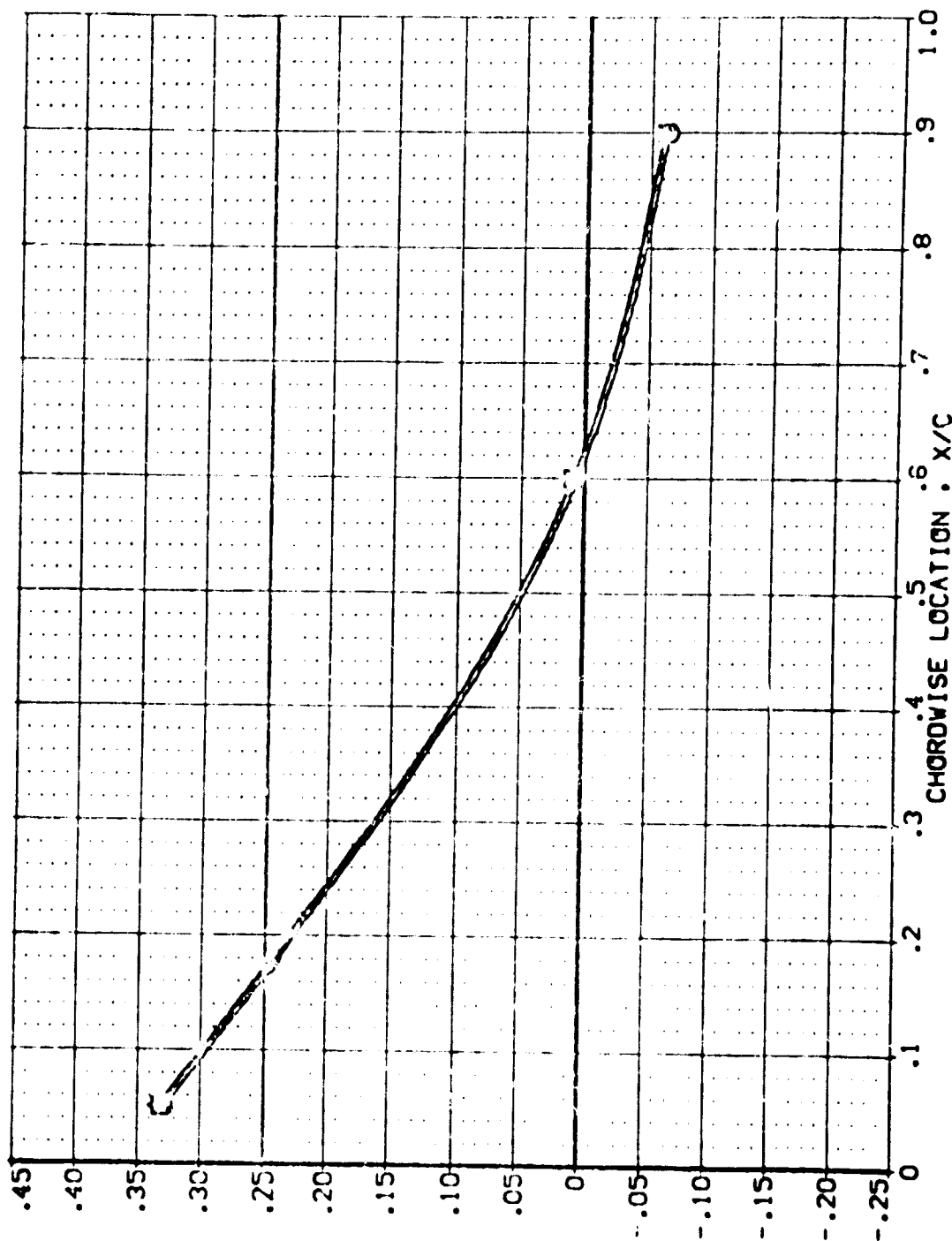
DATA SET SYMBOL

(U20415)
(U20420)
(U20477)
(U20478)

CONFIGURATION DESCRIPTION

AVES 07-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 07-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 07-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 07-710 1A12C 01 T1 S1 UPPER WING PRESSURE

POWER 0.000
1.000
1.000
1.000
GIMBAL 1.000
1.000
1.000
1.000
SPPR 0.826
0.826
0.826
0.826
OPR 23.860
23.860
23.860
23.860



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 0.000 Y/B = 0.887

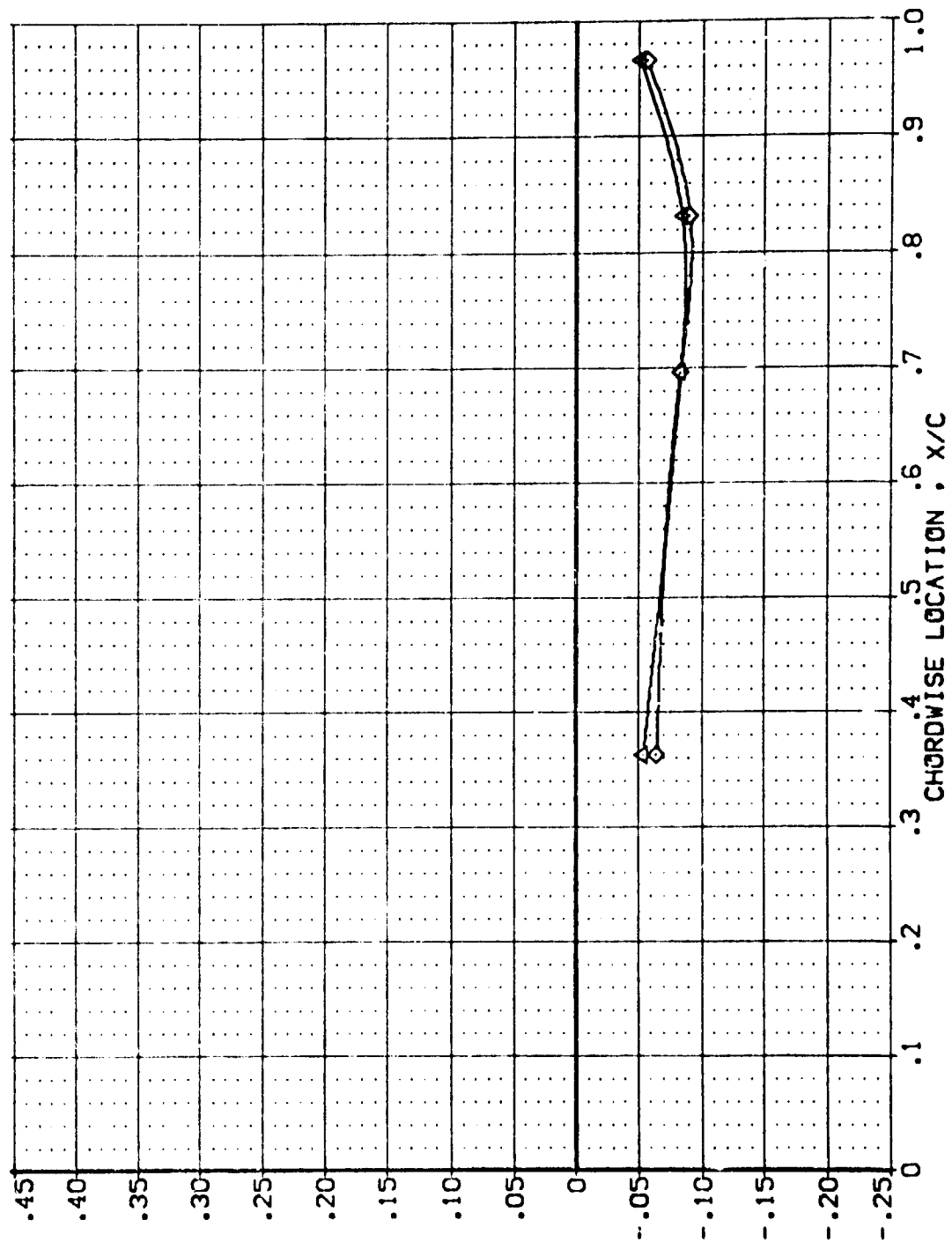
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SRPR GINBAL

(UB32046) ANES 87-710 IAL2C 01 T1 S1 .000 23.860 .826 1.000

(UB32050) ANES 87-710 IAL2C 01 T1 S1 .000 23.860 .826 1.000

(UB32077) ANES 87-710 IAL2C 01 T1 S1 .000 23.860 .826 1.000

(UB32075) ANES 87-710 IAL2C 01 T1 S1 .000 23.860 .826 1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .299

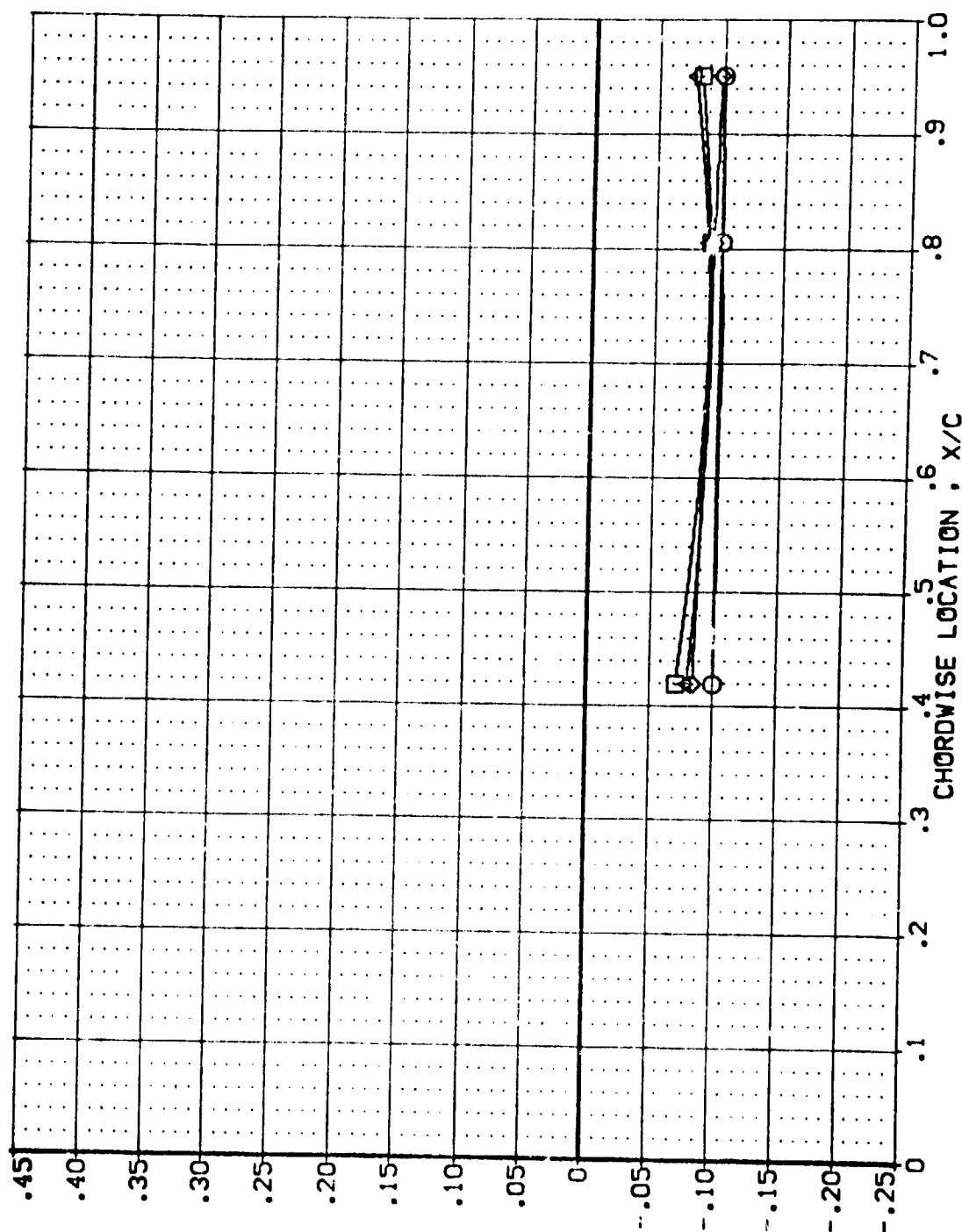
DATA SET SYMBOL

(UBZ046)
(UBZ050)
(UBZ077)
(UBZ076)

CONFIGURATION DESCRIPTION

AVES 87-710 [A] [Z] C [0] [1] T [1] S [1]
AVES 87-710 [A] [Z] C [0] [1] T [1] S [1]
AVES 87-710 [A] [Z] C [0] [1] T [1] S [1]
AVES 87-710 [A] [Z] C [0] [1] T [1] S [1]

POWER C/P SR-PR GIMBAL
.000 23.860 1.000
1.000 23.860 1.000
1.000 23.860 1.000

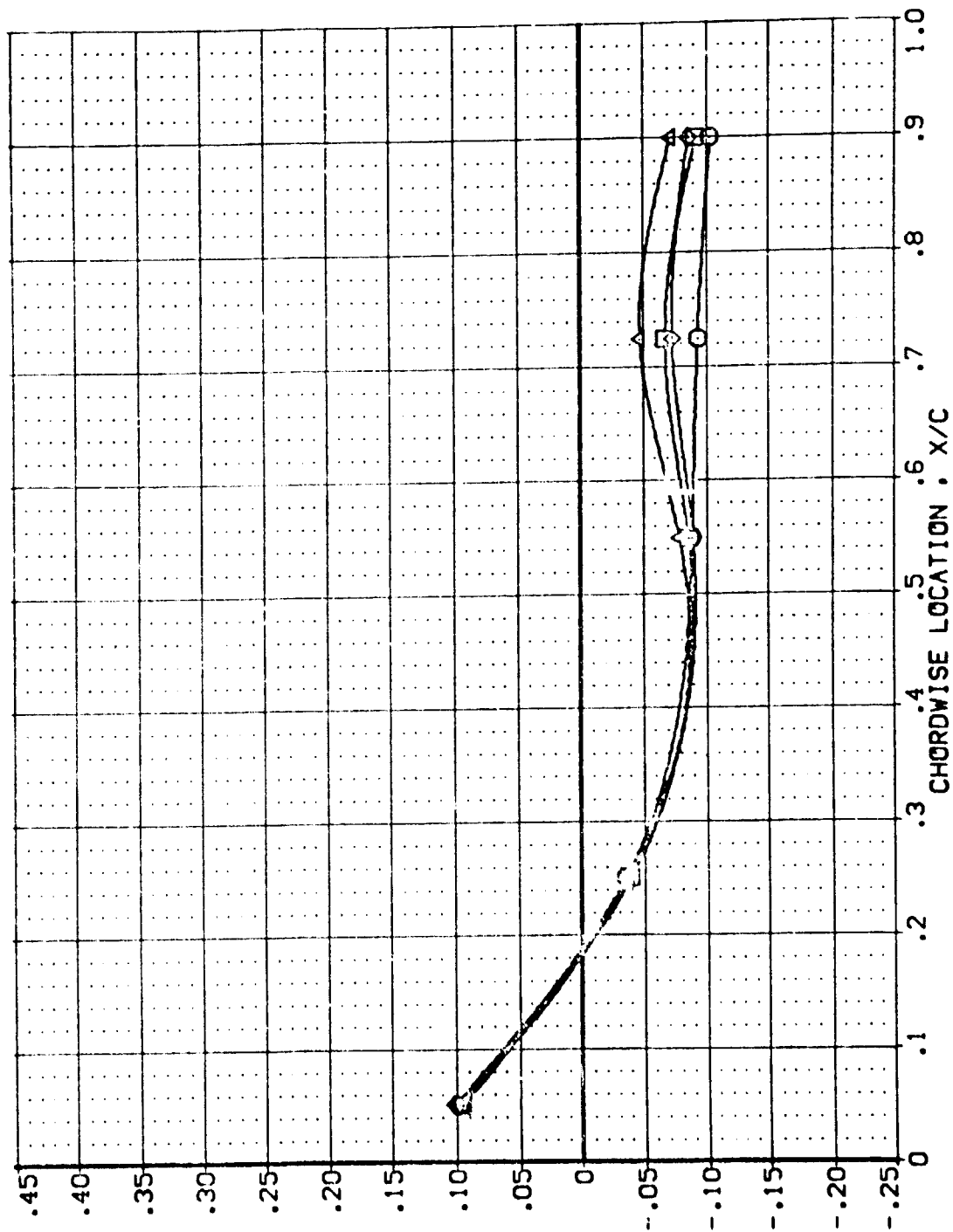


PRESSURE COEFFICIENT, CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .427

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	DPR	SRPR	QIMBAL
(UB7046)	AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	.000	23.860	.826	1.000
(UB7050)	AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UB7077)	AVES 87-710 [A12C 01 T1 S4] UPPER WING PRESSURE	.000	23.860	.826	1.000
(UB7076)	AVES 87-710 [A12C 01 T1 S4] UPPER WING PRESSURE	1.000	23.860	.826	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

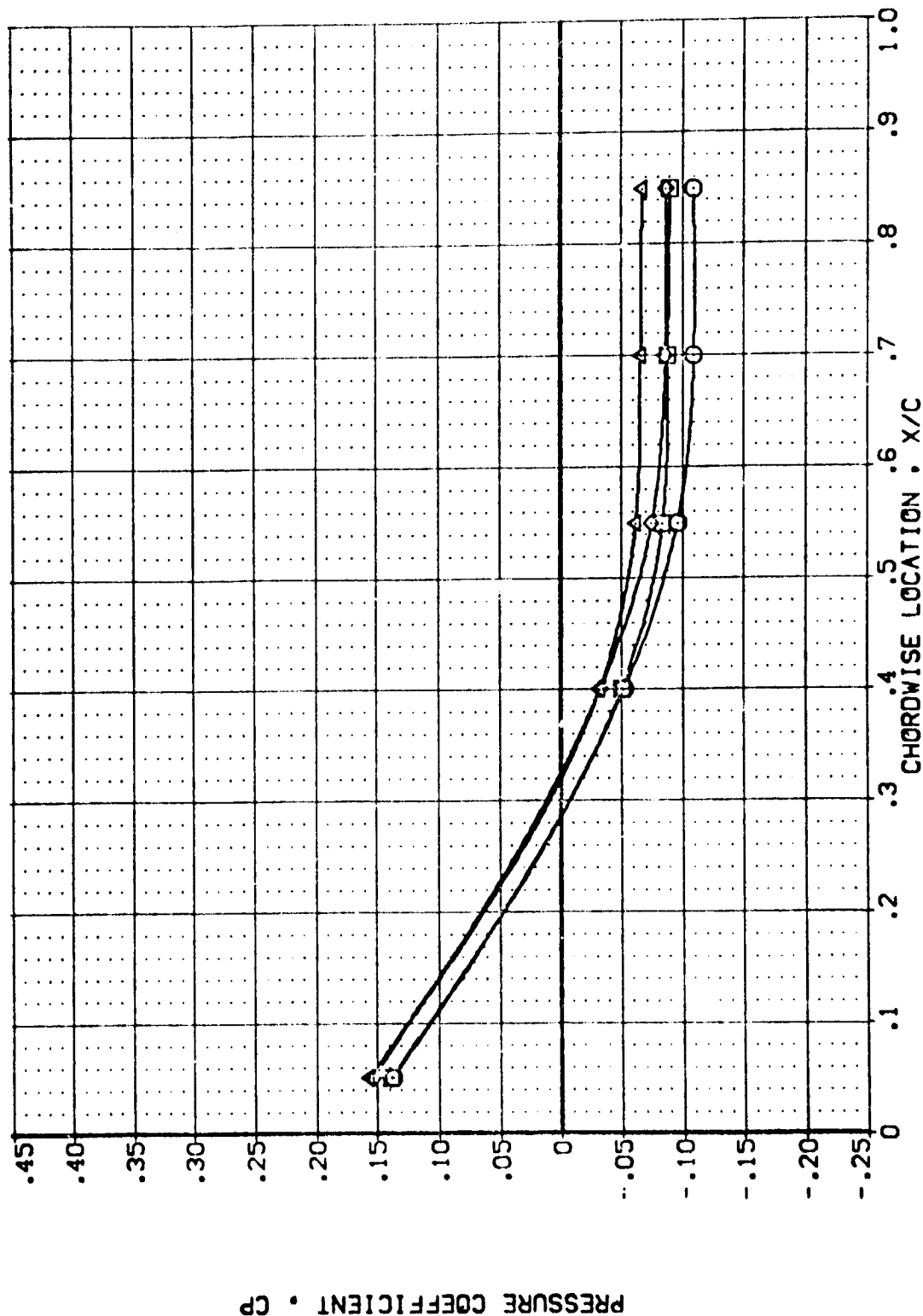
MACH = 3.500 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB0046)	AVES 87-710	IA12C	GI	TI	SI	UPPER WING PRESSURE
(UB0050)	AVES 87-710	IA12C	GI	TI	SI	UPPER WING PRESSURE
(UB0077)	AVES 87-710	IA12C	GI	TI	SI	UPPER WING PRESSURE
(UB0076)	AVES 87-710	IA12C	GI	TI	SI	UPPER WING PRESSURE

POWER QPR SPFR GIMBAL

.000	23.860	.826	1.000
1.000	23.860	.826	1.000
1.000	23.860	.826	1.000

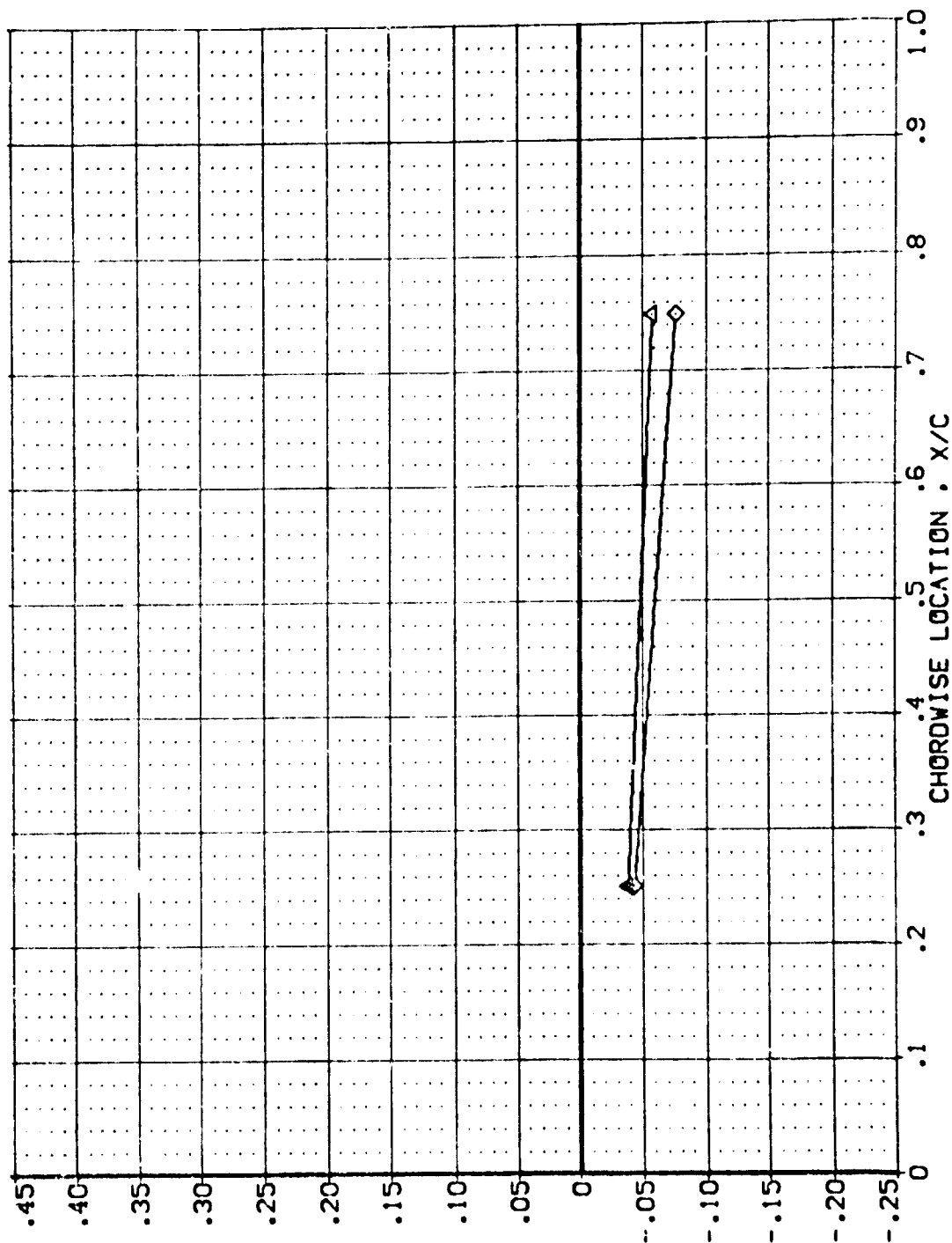


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .673

PAGE 232

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SRMR	GIMBAL
(UBJ046)	AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	.000			1.000
(UBJ050)	AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UBJ077)	AMES 87-710 IAI2C 01 T1 S4 UPPER WING PRESSURE	.000			1.000
(UBJ076)	AMES 87-710 IAI2C 01 T1 S4 UPPER WING PRESSURE	1.000	23.860	.826	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

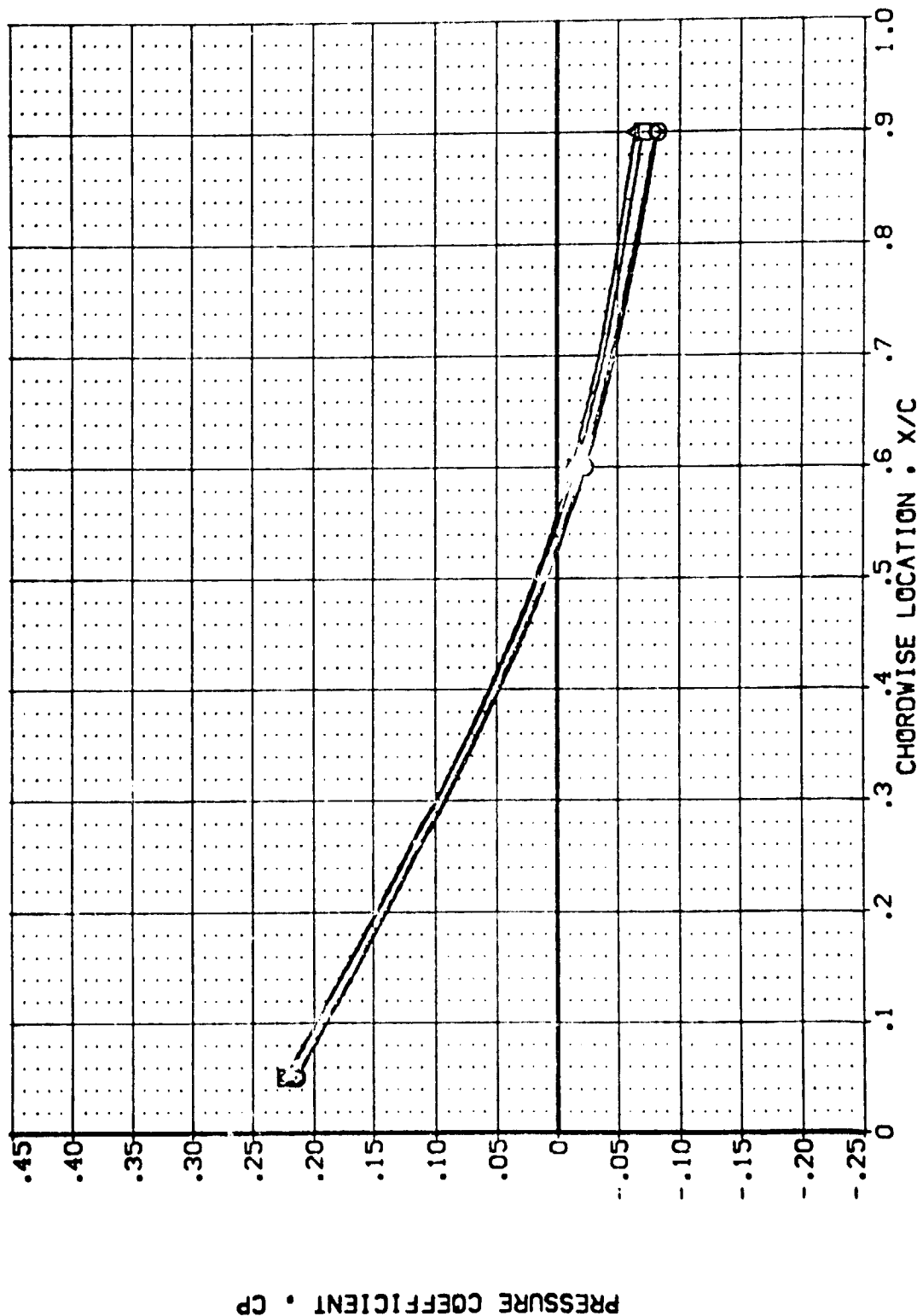
MACH = 3.500 ALPHA = 8.000 Y/B = .780 PAGE 233

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ046)
(UBZ050)
(UBZ077)
(UBZ076)

AVES 87-710 IAI2C 01 TI SI UPPER WING PRESSURE
AVES 87-710 IAI2C 01 TI SI UPPER WING PRESSURE
AVES 87-710 IAI2C 01 TI SA UPPER WING PRESSURE

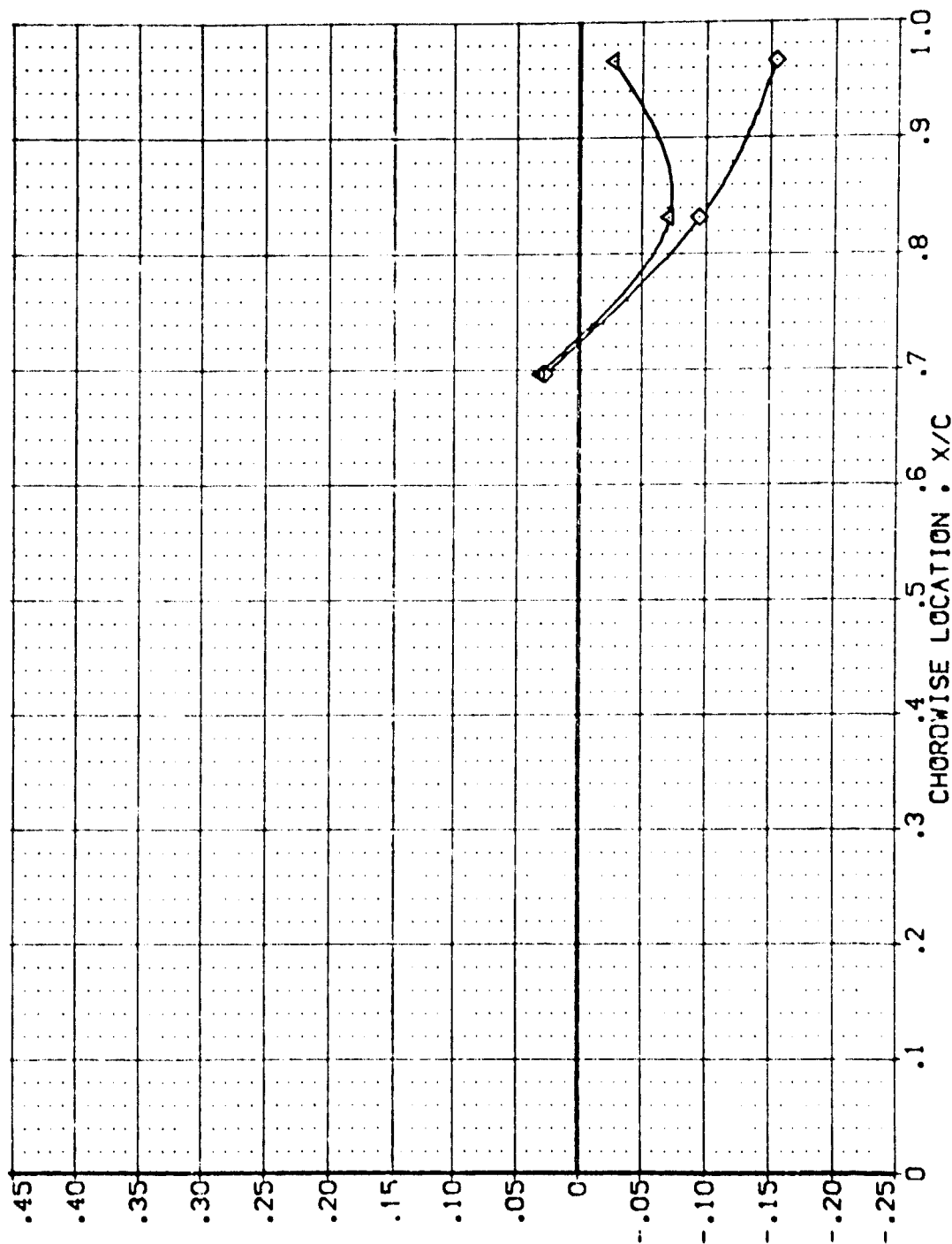
POWER DPR SCWPR GIMBAL
.000 23.860 .826 1.000
1.000 23.860 .826 1.000
1.000 23.860 .826 1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .887

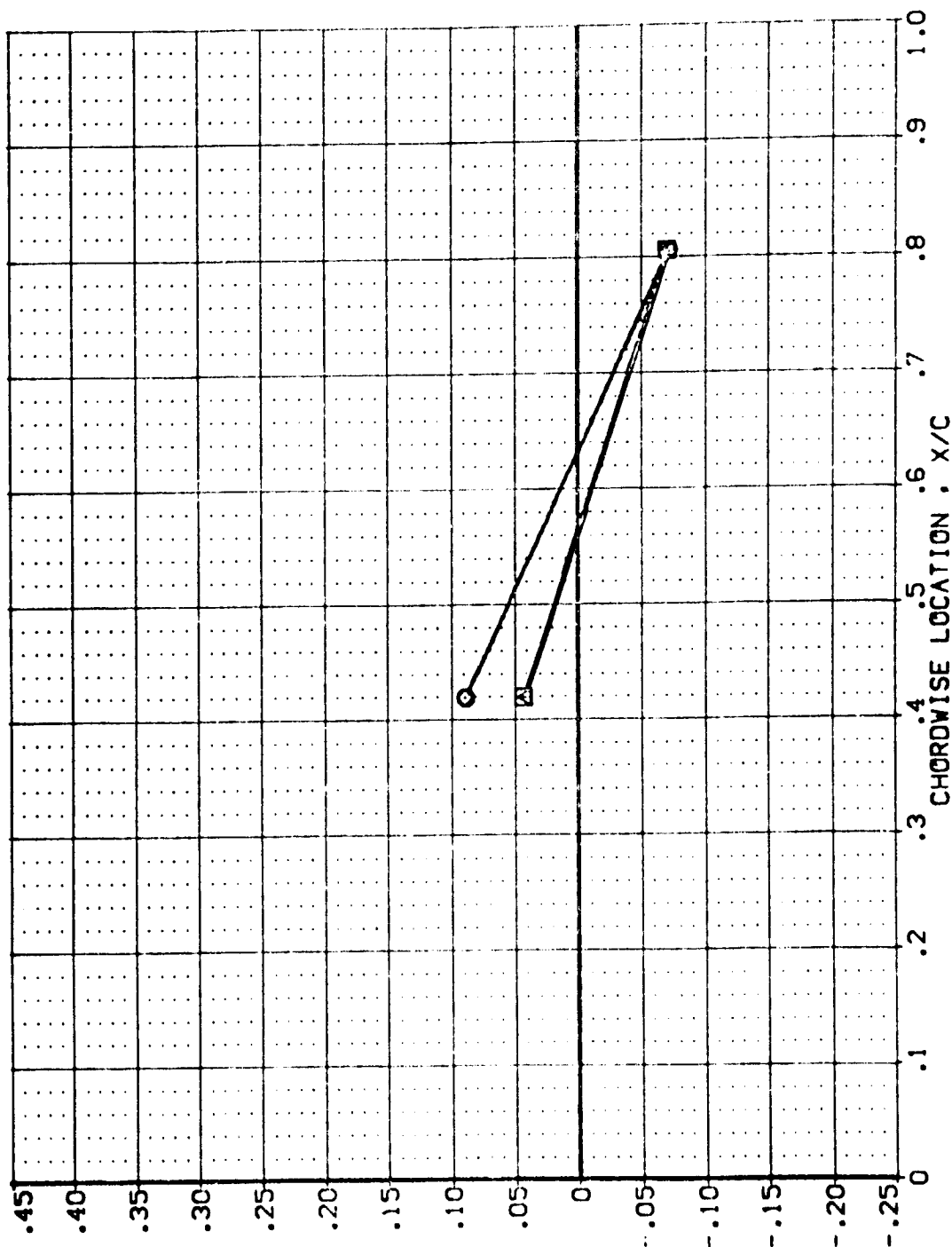
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	DPR	SRPR	GIMBAL
(LB0037)	ANES 87-710	.000	31.260	.916	1.000
(LB0038)	ANES 87-710	1.000	31.260	.916	1.000
(LB0039)	ANES 87-710	1.000	31.260	.916	1.000
(LB0040)	ANES 87-710	1.000	31.260	.916	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .299

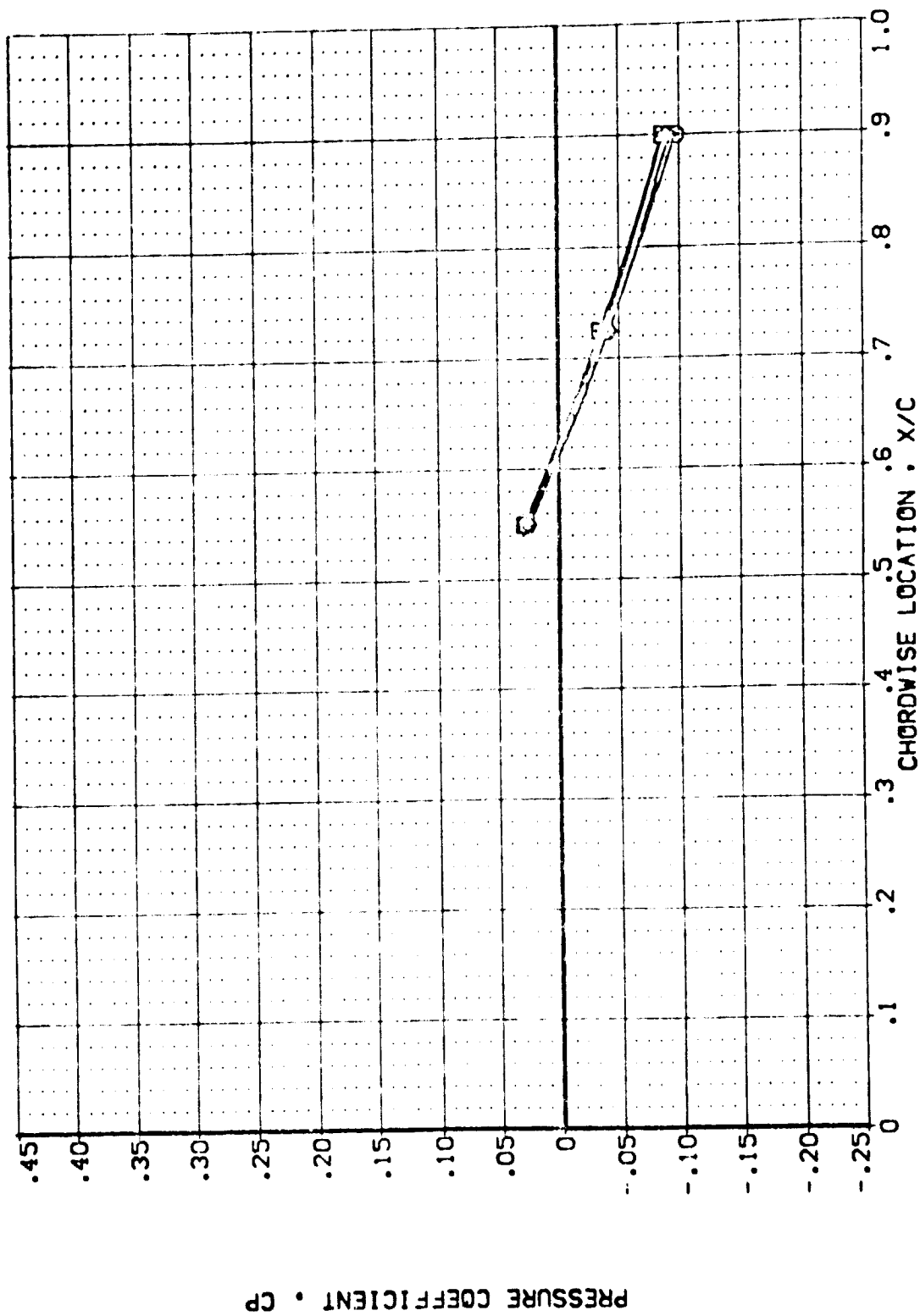
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CPR	SRPR	GIMBAL
(LBZ037)	AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LBZ034)	AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	1.000	31.260	.916	1.000
(LBZ073)	AVES 87-710 IAI2C 01 T1 S4 LOWER WING PRESSURE	.000			1.000
(LBZ072)	AVES 87-710 IAI2C 01 T1 S4 LOWER WING PRESSURE	1.000	31.260	.916	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CFR	SRFR	GIMBAL
(LBZ037)	AVES 87-710	1.000	31.260	.916	1.000
(LBZ034)	AVES 87-710	1.000	31.260	.916	1.000
(LBZ073)	AVES 87-710	1.000	31.260	.916	1.000
(LBZ072)	AVES 87-710	1.000	31.260	.916	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

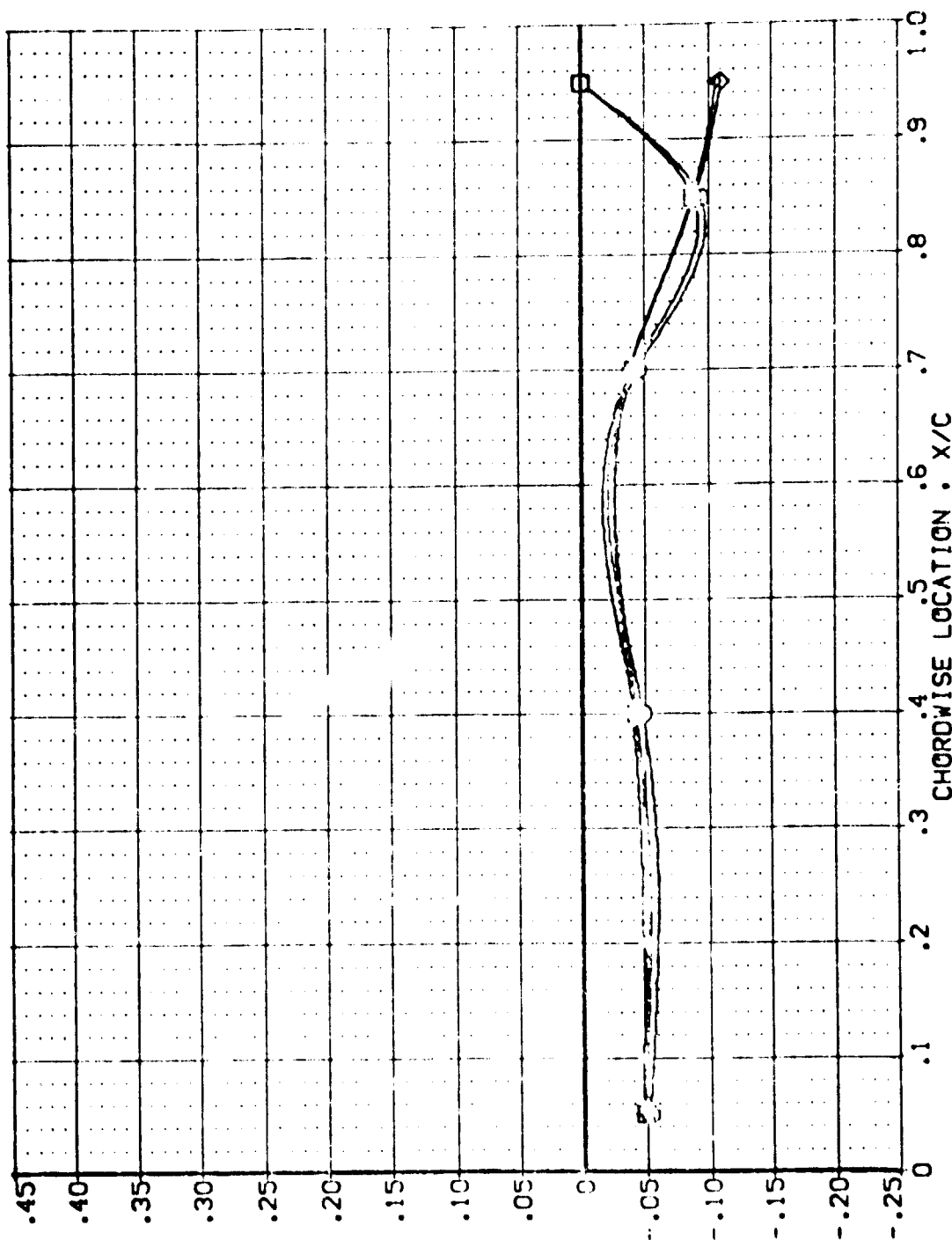
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/P-FR G/HBAL

(LBZ007) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 31.260 .916 1.000

(LBZ004) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 31.260 .916 1.000

(LBZ073) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 31.260 .916 1.000

(LBZ072) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 31.260 .916 1.000



PRESSURE COEFFICIENT, CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB0337)
(LB0334)
(LB0373)
(LB0372)

AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

LA12C 01 T1 S1
LA12C 01 T1 S1
LA12C 01 T1 S1
LA12C 01 T1 S1

POWER 0.000
POWER 1.000
POWER 0.000
POWER 1.000

GIMBAL
GIMBAL
GIMBAL
GIMBAL

SRPR
SRPR
SRPR
SRPR

QPR
QPR
QPR
QPR

0.000
0.000
0.000
0.000

0.916
0.916
0.916
0.916

0.916
0.916
0.916
0.916

0.916
0.916
0.916
0.916

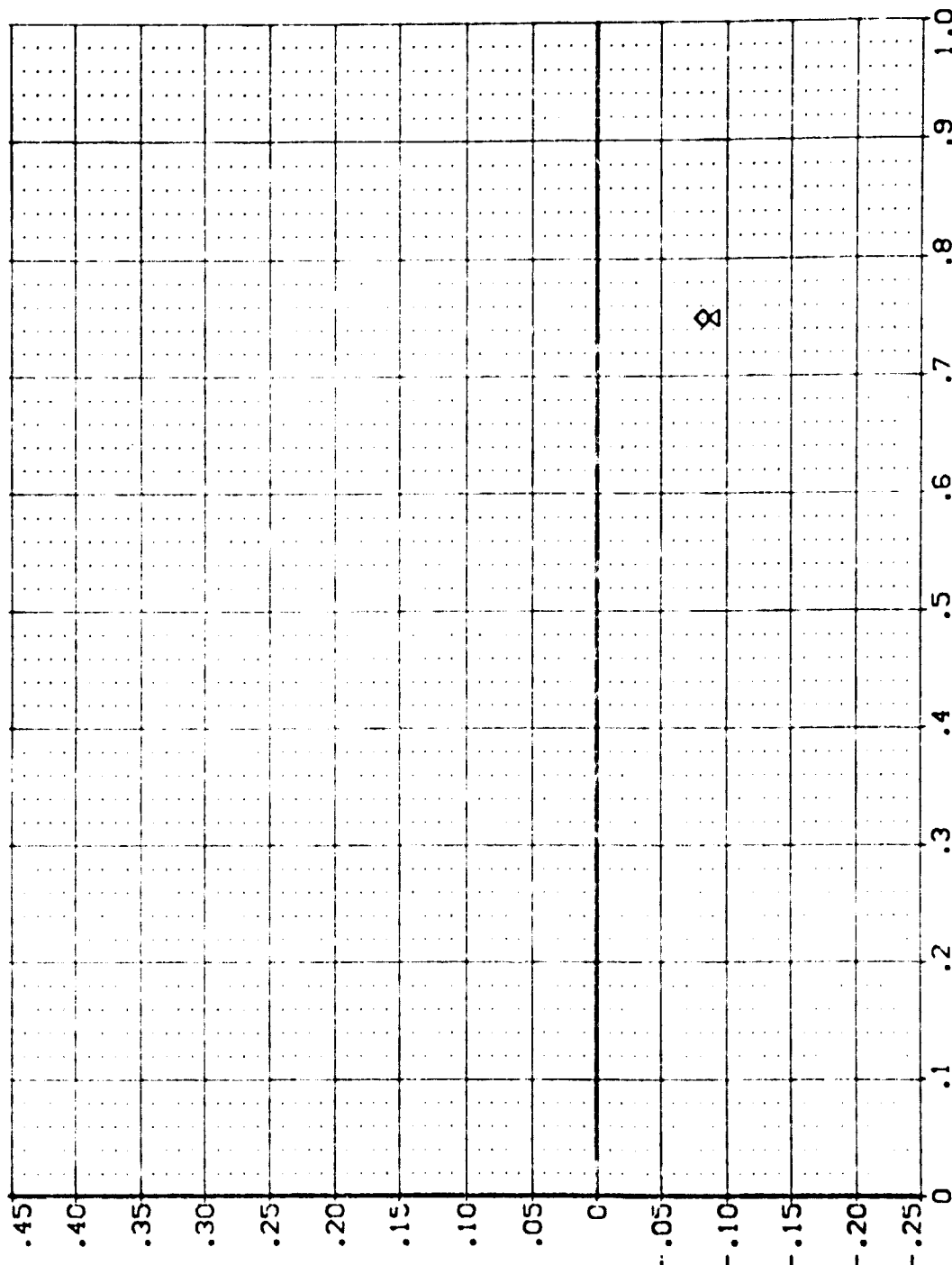
0.916
0.916
0.916
0.916

0.916
0.916
0.916
0.916

0.916
0.916
0.916
0.916

0.916
0.916
0.916
0.916

0.916
0.916
0.916
0.916

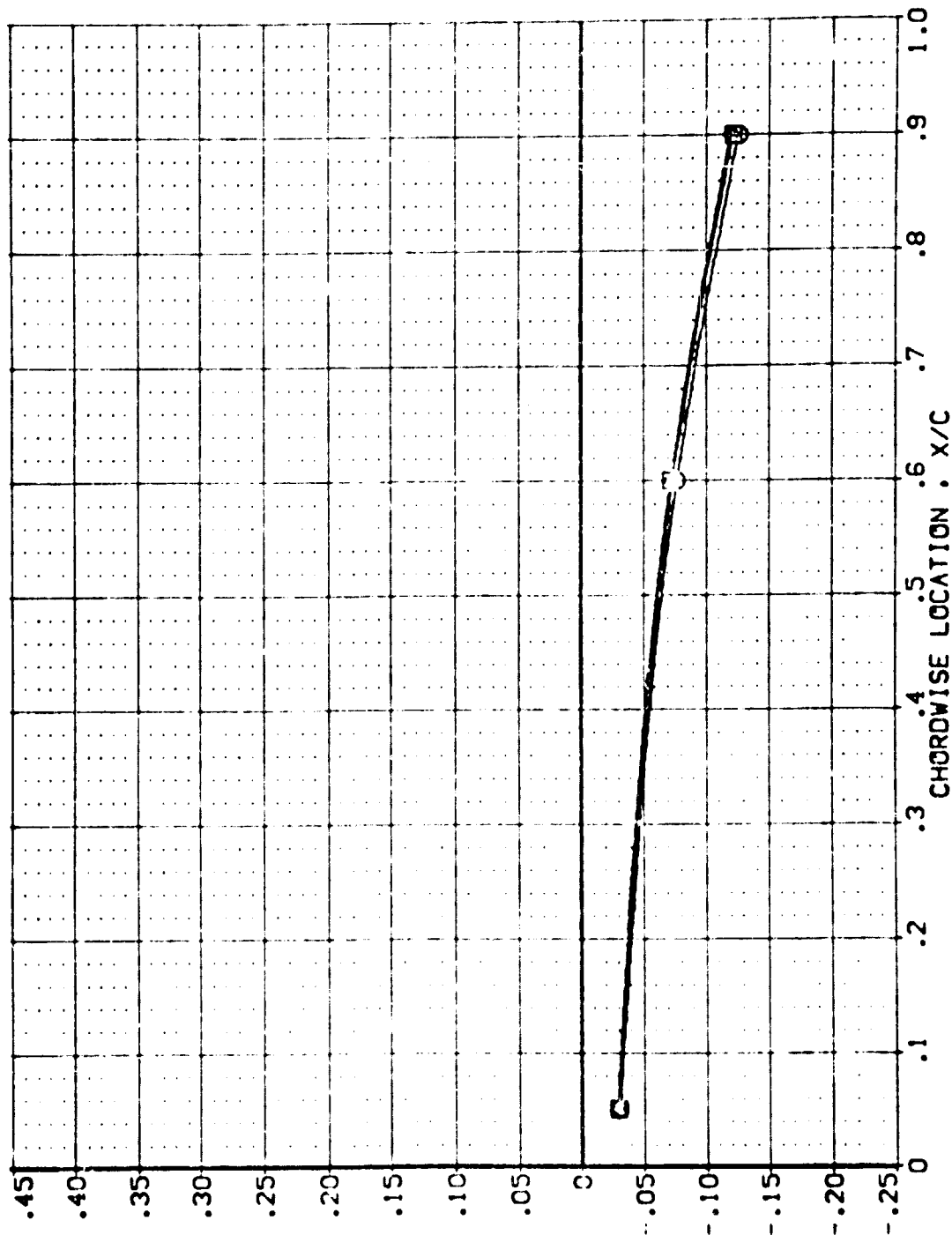


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LB2077) ASES 87-710 IALXC 01 T1 S1 LOWER WING PRESSURE
 (LB2074) ASES 87-710 IALXC 01 T1 S1 LOWER WING PRESSURE
 (LB2073) ASES 87-710 IALXC 01 T1 S1 LOWER WING PRESSURE
 (LB2072) ASES 87-710 IALXC 01 T1 S1 LOWER WING PRESSURE

POWER C/P S/P/R OIMBAL
 .000 31.260 .916 1.000
 1.000 31.260 .916 1.000
 1.000 31.260 .916 1.000

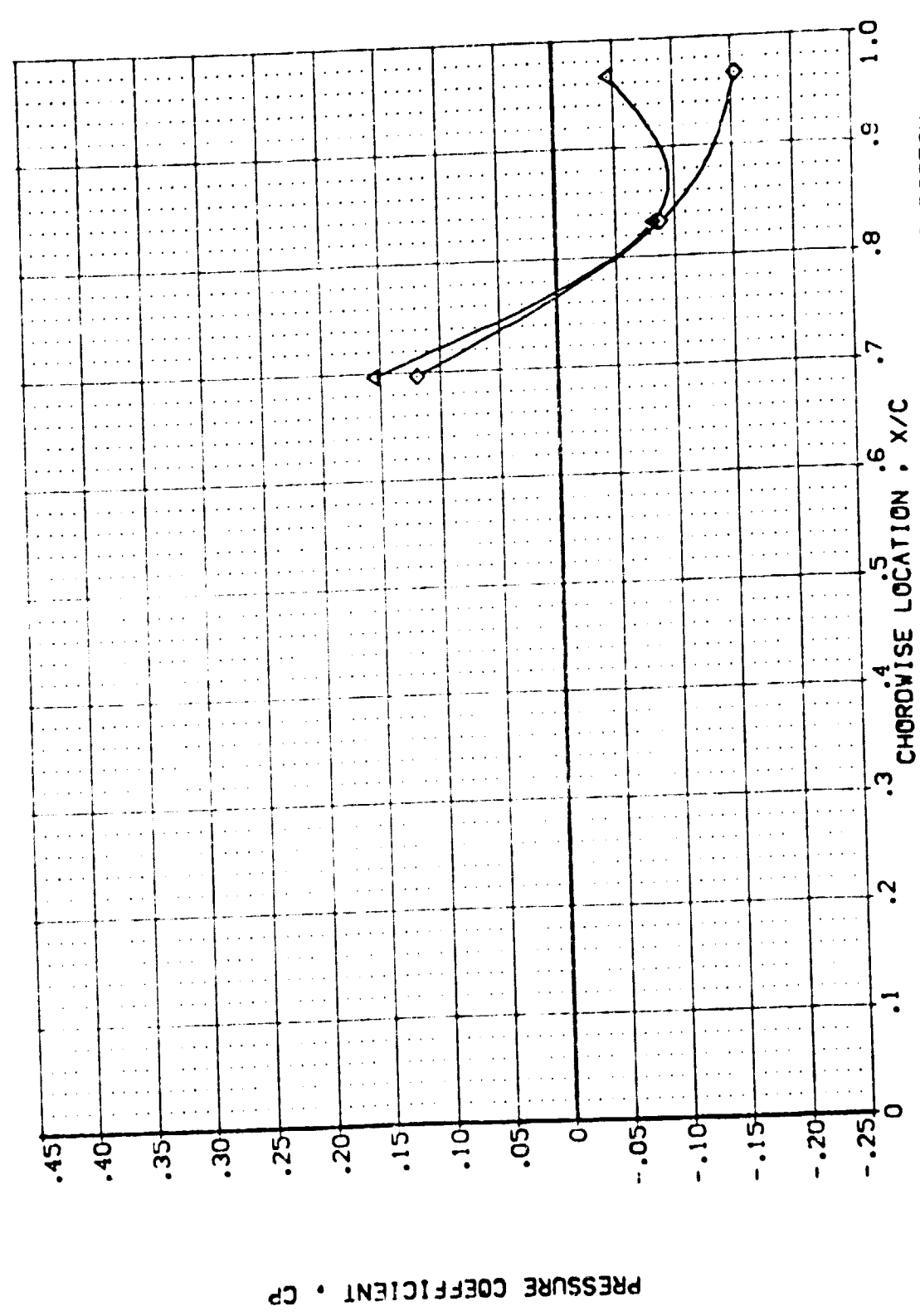


PRESSURE COEFFICIENT • CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .887 PAGE 240

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	PC-ER	OTR	SR-PR	GIMBAL
(18-0371)	AVES 87-710 [A12C 01] T1 S1 LOWER WING PRESSURE	.000			1.000
(18-0372)	AVES 87-710 [A12C 01] T1 S1 LOWER WING PRESSURE	1.000	31.260	.916	1.000
(18-0373)	AVES 87-710 [A12C 01] T1 S4 LOWER WING PRESSURE	1.000			1.000
(18-0372)	AVES 87-710 [A12C 01] T1 S4 LOWER WING PRESSURE	1.000	31.260	.916	1.000



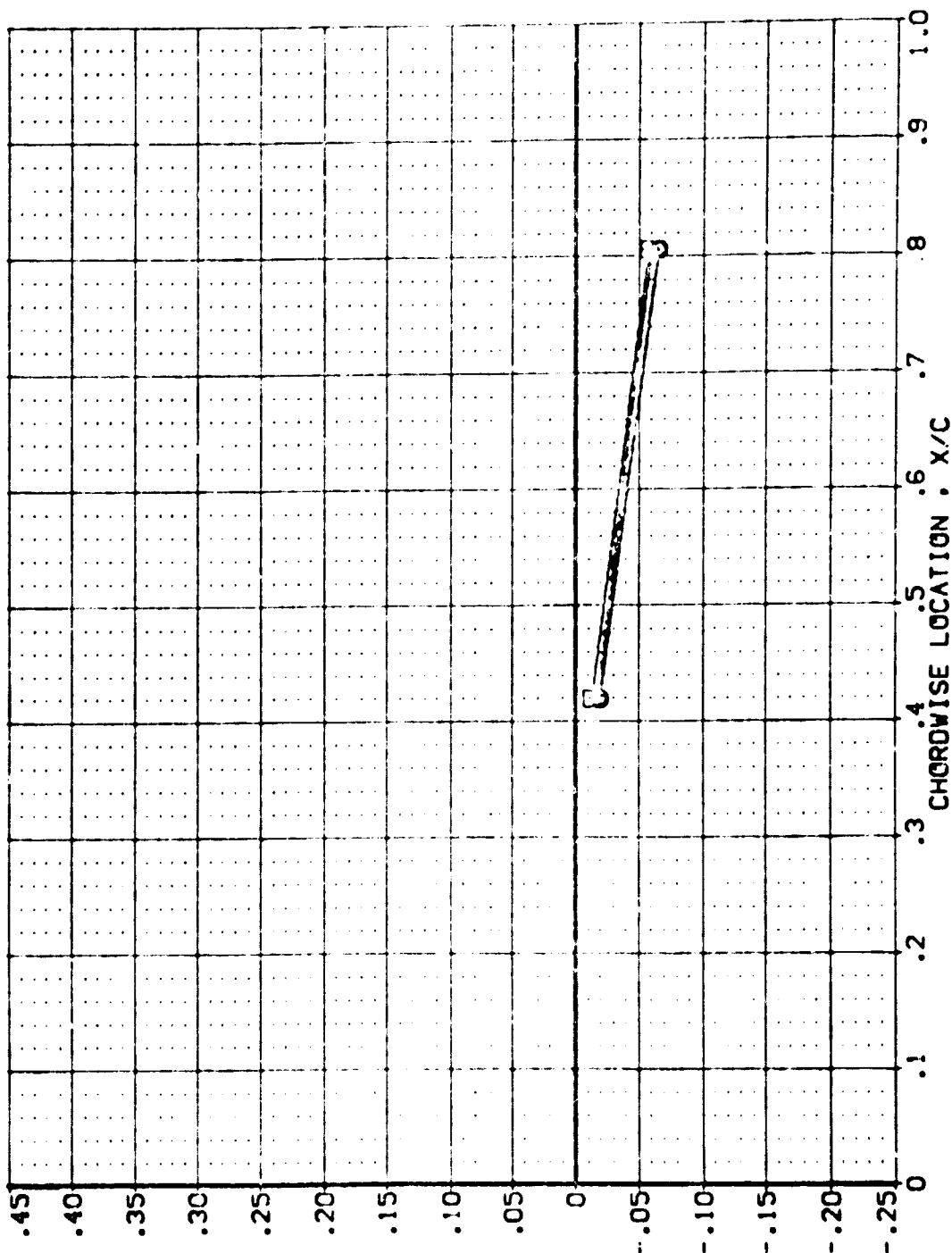
PRESSURE COEFFICIENT • CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .299 PAGE 241

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER D/F SFRP GIMBAL

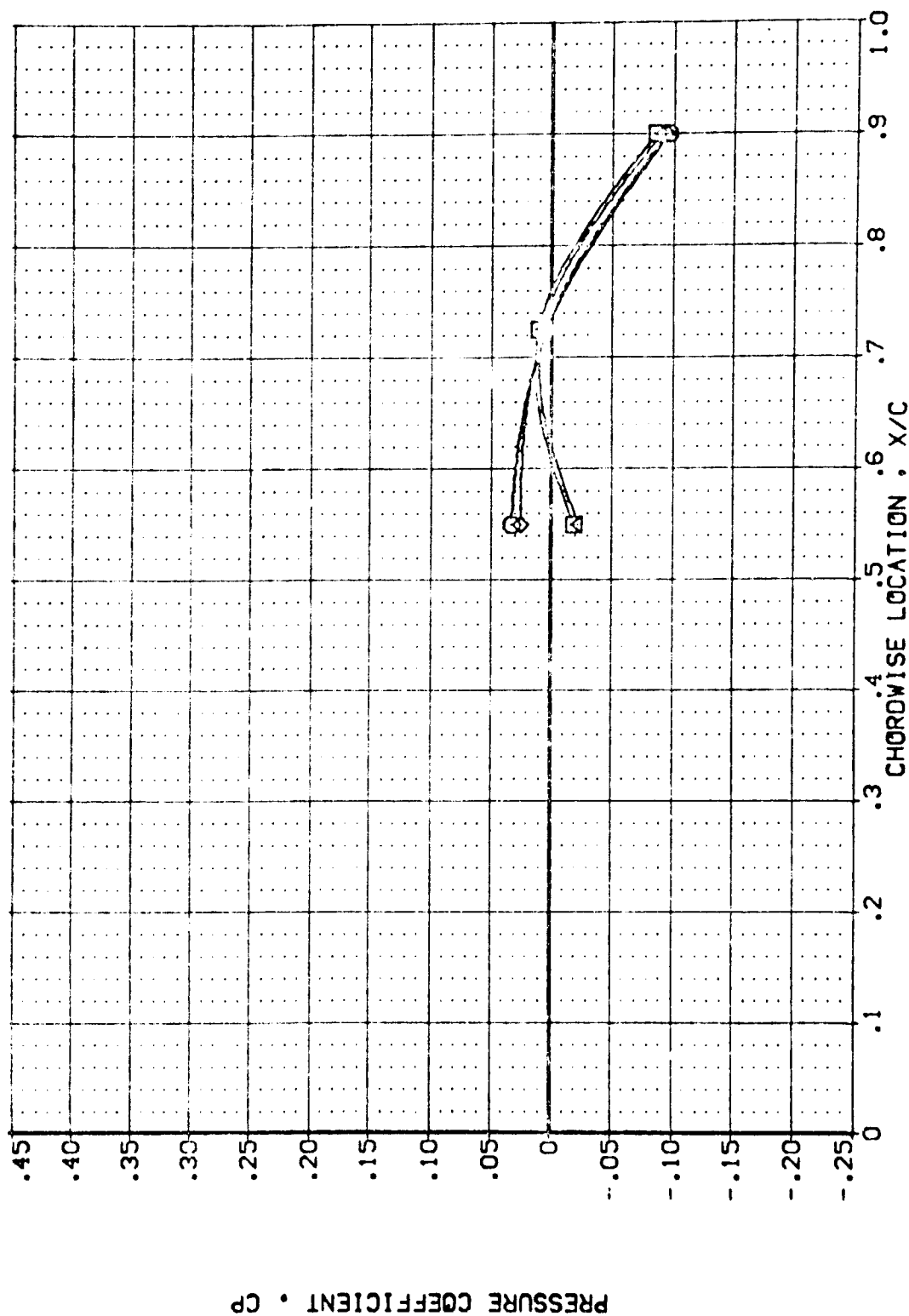
(LB2007)	AMES 87-710	LA12C 01	TI	SI	LOWER WING PRESSURE	.000	31.260	.916	1.000
(LB2004)	AMES 87-710	LA12C 01	TI	SI	LOWER WING PRESSURE	1.000	31.260	.916	1.000
(LB2073)	AMES 87-710	LA12C 01	TI	S4	LOWER WING PRESSURE	.000	31.260	.916	1.000
(LB2072)	AMES 87-710	LA12C 01	TI	S4	LOWER WING PRESSURE	1.000	31.260	.916	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .427 PAGE 242

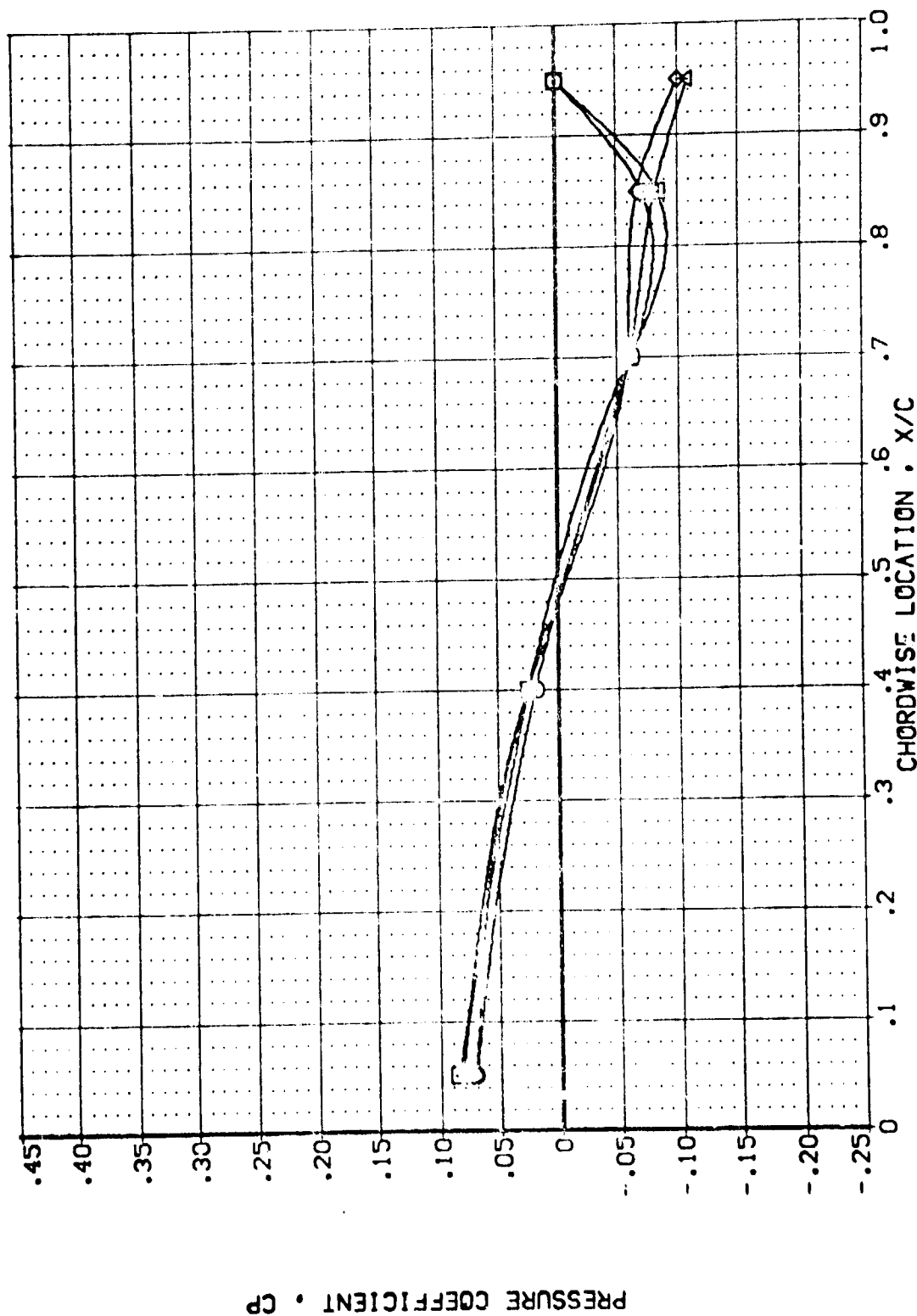
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CPR	SQ-PR	QINBAL
(LB2071)	AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	.000	31.260	.916	1.000
(LB2072)	AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	1.000	31.260	.916	1.000
(LB2073)	AVES 87-710 1A12C 01 T1 S4 LOWER WING PRESSURE	1.000	31.260	.916	1.000
(LB2074)	AVES 87-710 1A12C 01 T1 S4 LOWER WING PRESSURE	1.000	31.260	.916	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	QPR	SRPR	QHEAL
(LBZ037)	AVES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE	.000	31.260	.916	1.000
(LBZ034)	AVES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE	1.000	31.260	.916	1.000
(LBZ073)	AVES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE	.000	31.260	.916	1.000
(LBZ072)	AVES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE	1.000	31.260	.916	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .673 PAGE 244

DATA SET SYMBOL

(LBZ071)
(LBZ072)
(LBZ073)
(LBZ074)

CONFIGURATION DESCRIPTION

AMES 87-710 [A] [Z] [C] [O] [I] [T] [S] LOWER WING PRESSURE
AMES 87-710 [A] [Z] [C] [O] [I] [T] [S] LOWER WING PRESSURE
AMES 87-710 [A] [Z] [C] [O] [I] [T] [S] LOWER WING PRESSURE
AMES 87-710 [A] [Z] [C] [O] [I] [T] [S] LOWER WING PRESSURE

POWER C/P

.000
1.000
1.000
1.000

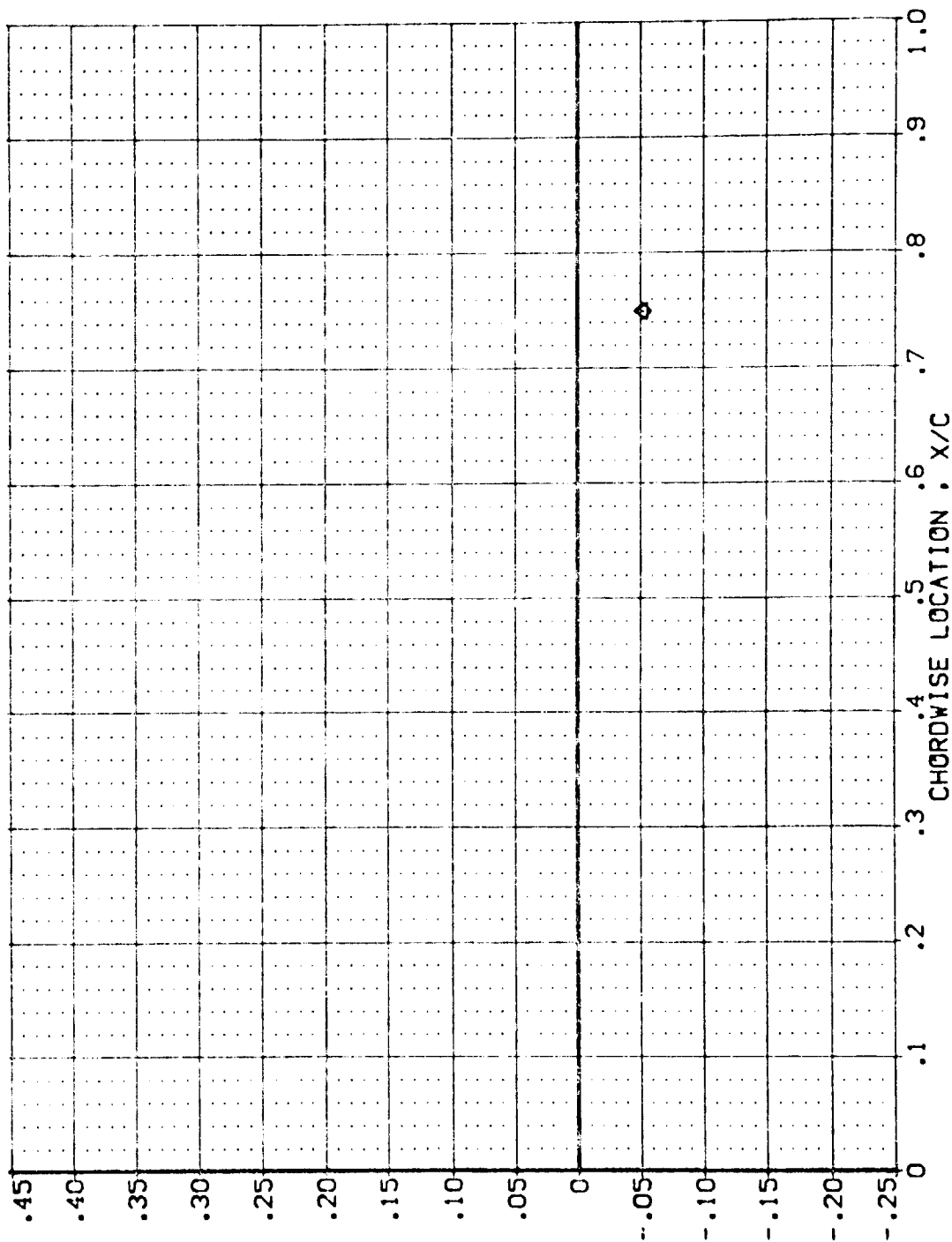
SC-PR

.916
.916

01/HBAL

1.000
1.000
1.000
1.000

PRESSURE COEFFICIENT, CP



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

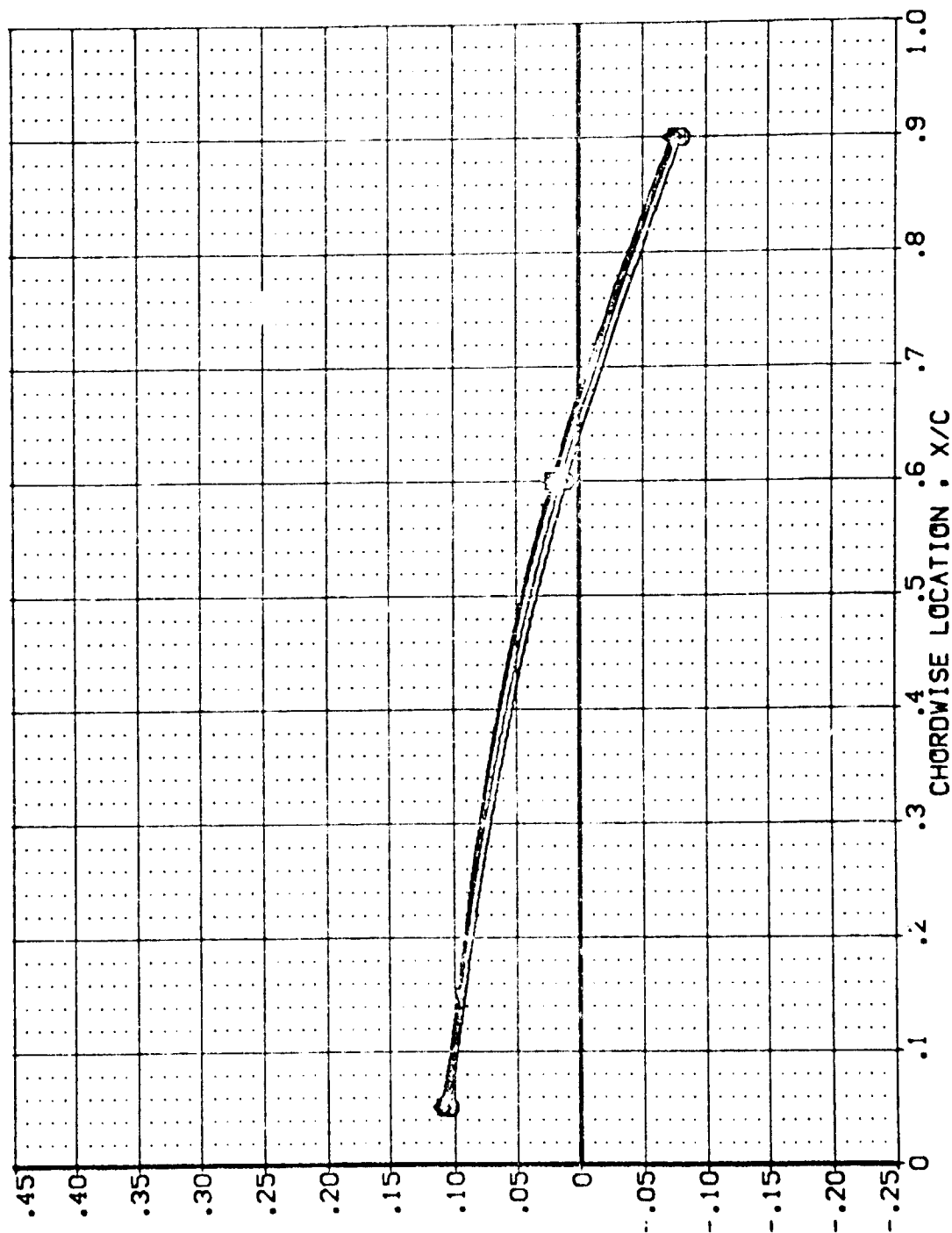
MACH = 2.500 ALPHA = .000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ037)
(LBZ034)
(LBZ073)
(LBZ072)

APES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
APES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
APES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
APES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER C/R SC-PR 01MBAL
.000 31.260 .916 1.000
1.000 31.260 .916 1.000
1.000 31.260 .916 1.000

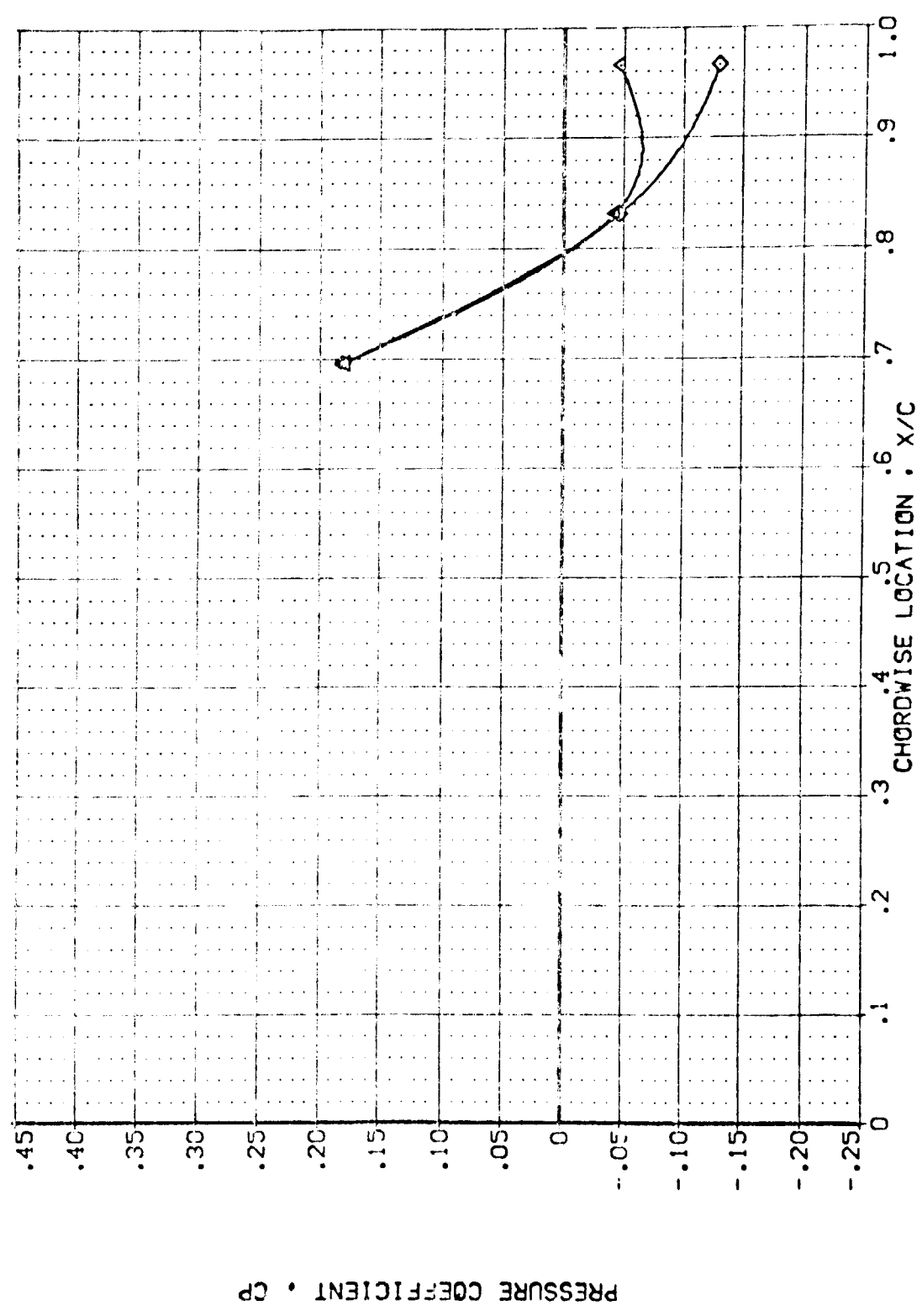


PRESSURE COEFFICIENT • CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .887 PAGE 246

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	UPR	SWFR	GINVAL
(LB7037)	ARES 87-710 [A]2C 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LB7034)	ARES 87-710 [A]2C 01 T1 S1 LOWER WING PRESSURE	1.000	21.250	.916	1.000
(LB7073)	ARES 87-710 [A]2C 01 T1 S4 LOWER WING PRESSURE	.000			1.000
(LB7072)	ARES 87-710 [A]2C 01 T1 S4 LOWER WING PRESSURE	1.000	31.250	.916	1.000



PLUME AND SRC SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

DATA SET SYMBOL

(LBZ037)
(LBZ034)
(LBZ073)
(LBZ072)

CONFIGURATION DESCRIPTION

AVES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE

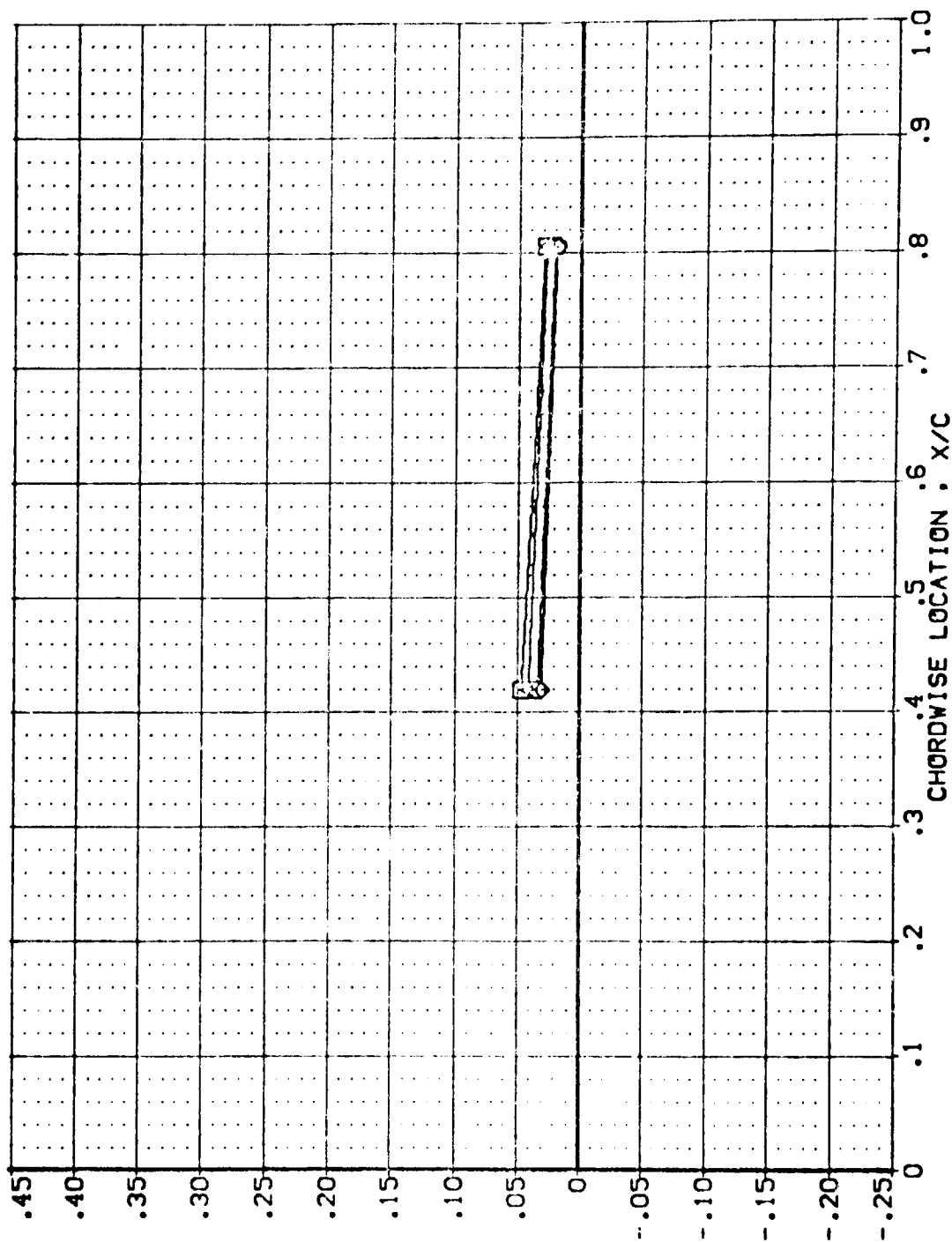
POWER 0.000
1.000
1.000
1.000

QFR 31.260
31.260

SRPR .916
.916

GIMBAL 1.000
1.000
1.000
1.000

PRESSURE COEFFICIENT • CP

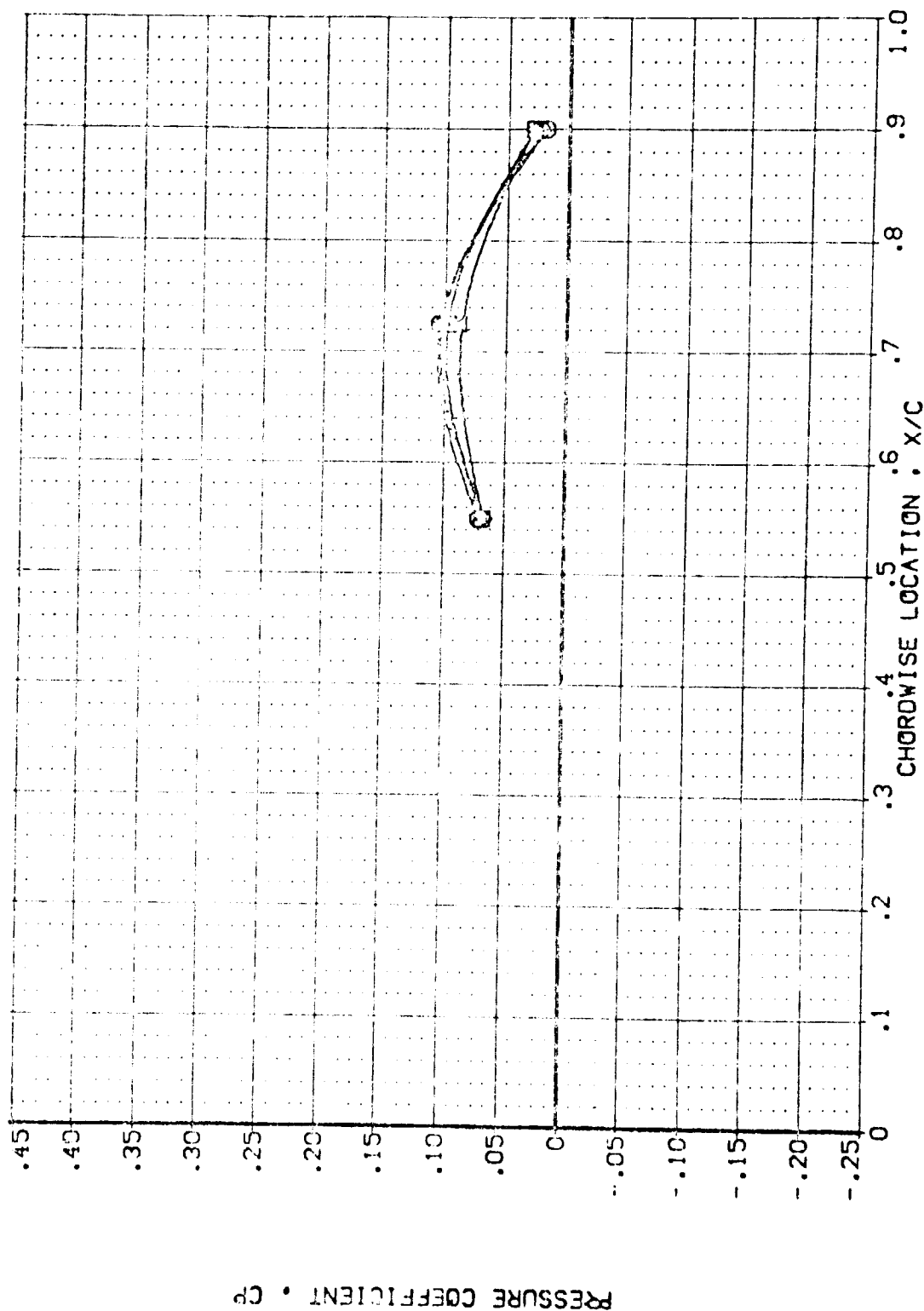


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .427

(L3257)
 (L3258)
 (L3259)
 (L3260)

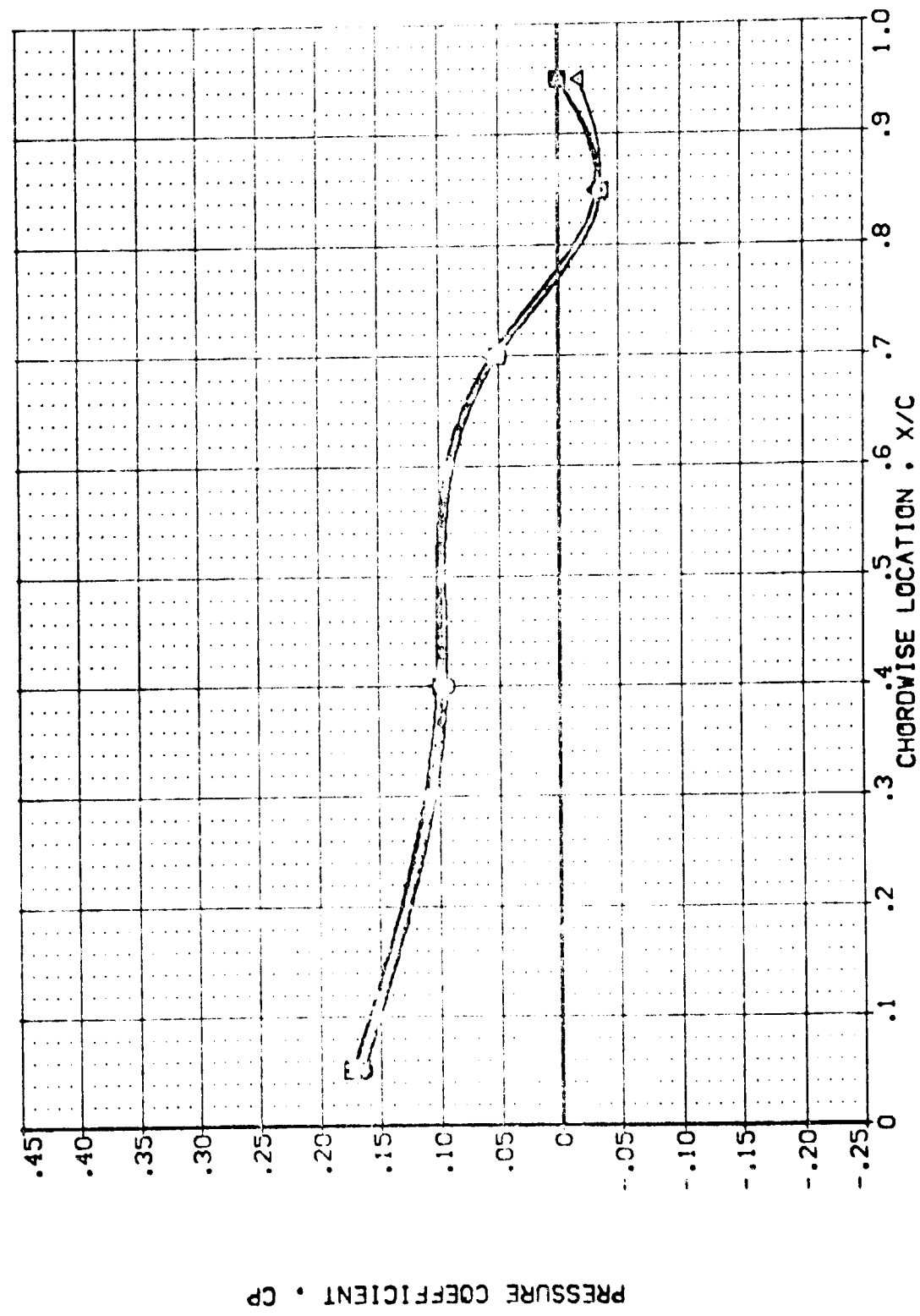
CONFIGURATION	DESCRIPTION	POWER	GER	STGR	GIBRAL
AVES 87-710	1A12C 01 T1 S1	.000			1.000
AVES 87-710	1A12C 01 T1 S1	.000	31.260	.316	1.000
AVES 87-710	1A12C 01 T1 S4	.000			1.000
AVES 87-710	1A12C 01 T1 S1	.000	31.260	.316	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

$$\text{MACH} = 2.500 \quad \text{ALPHA} = 6.000 \quad \text{Y/B} = .534$$

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	GPR	SRPR	GIMBAL
(LB2037)	AMES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	1.000	31.260	.916	1.000
(LB2034)	AMES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	1.000	31.260	.916	1.000
(LB2073)	AMES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	1.000	31.260	.916	1.000
(LB2072)	AMES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	1.000	31.260	.916	1.000

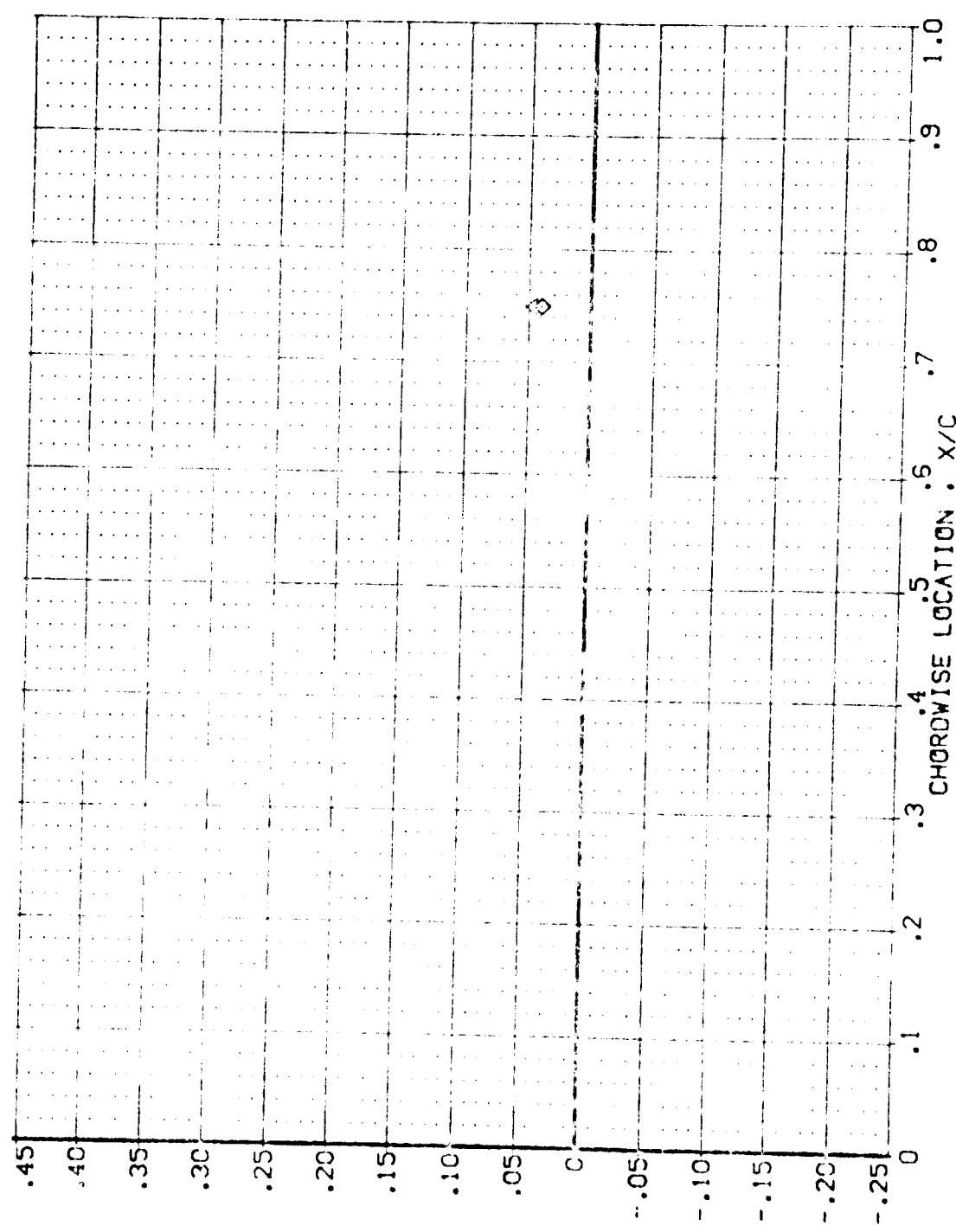


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .673 PAGE 250

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LUB-07) APES 87-7-0 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LUB-07) APES 87-7-0 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LUB-07) APES 87-7-0 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LUB-07) APES 87-7-0 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER C/R S/RPR GINBAL
 1.000 31.260 .916 1.000
 1.000 31.260 .916 1.000
 1.000 31.260 .916 1.000



PRESSURE COEFFICIENT • CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .780

DATA SET SYMBOL

(LB0007)
(LB0004)
(LB0073)
(LB0072)

CONFIGURATION DESCRIPTION

AVES 87-710 IAI2C 31 TI SI LOWER WING PRESSURE
AVES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE
AVES 87-710 IAI2C 01 TI SA LOWER WING PRESSURE
AVES 87-710 IAI2C 01 TI SA LOWER WING PRESSURE

POWER

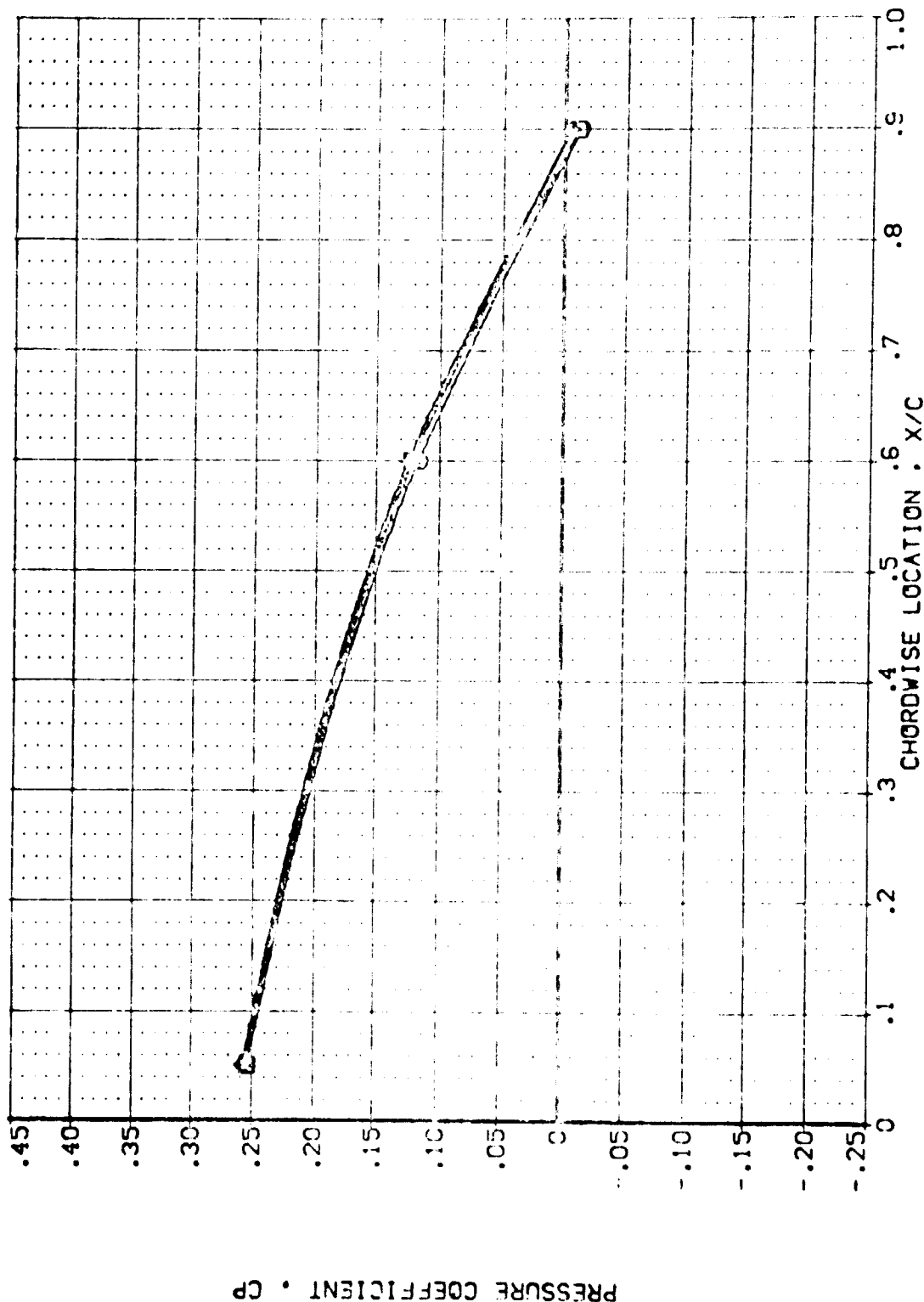
.000
1.000
1.000
1.000

QPR

31.260
31.260

GIPZAL

1.000
1.000
1.000
1.000

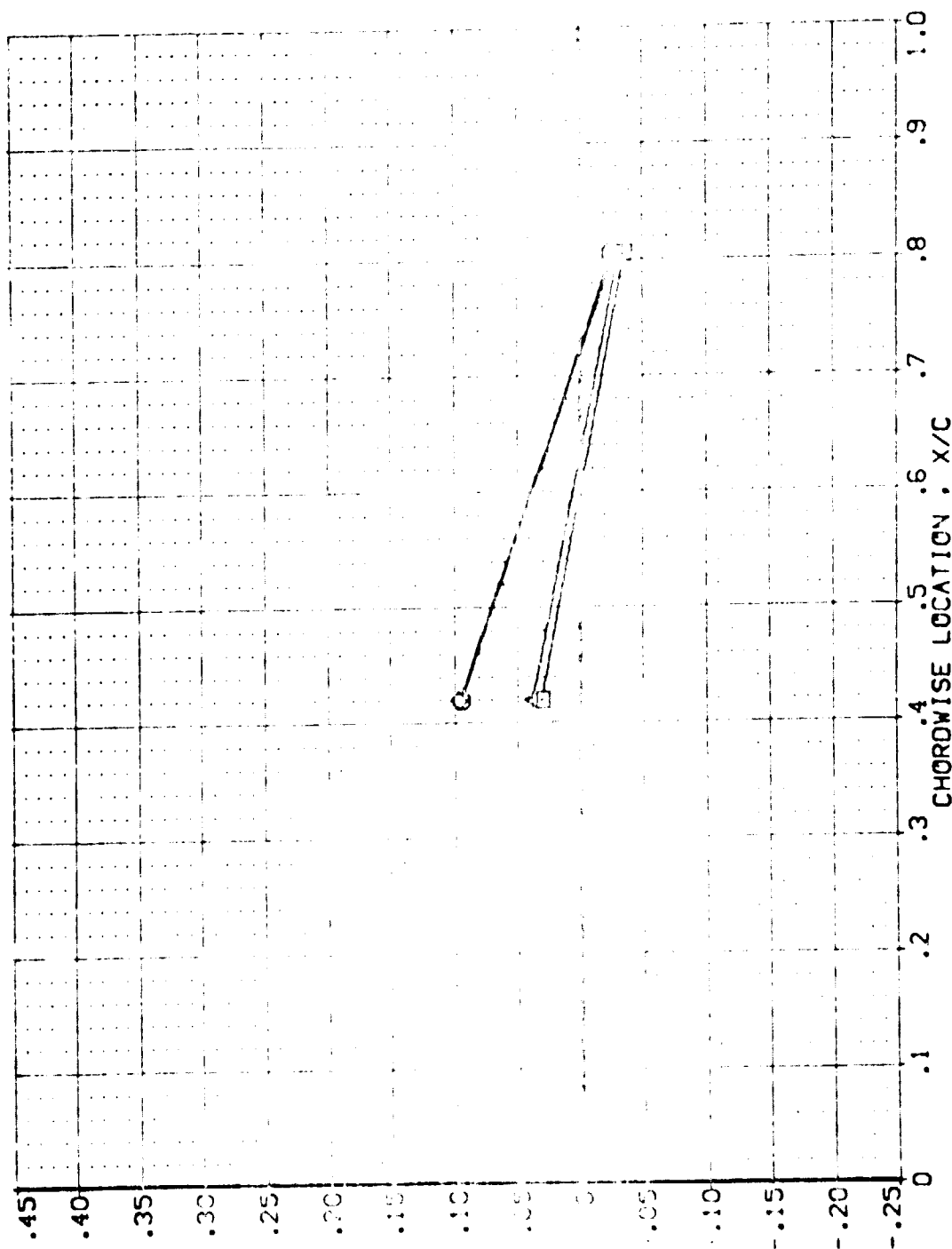


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER U:1 SUPER SIGNAL

(L80028)	YES 87-710	IA12C 31 T1 S1	LOWER WING PRESSURE	1.000	26.850	.719	1.000
(L80041)	YES 87-710	IA12C 31 T1 S1	LOWER WING PRESSURE	1.000	26.850	.719	1.000
(L80075)	YES 87-710	IA12C 31 T1 S1	LOWER WING PRESSURE	1.000	26.850	.719	1.000
(L80074)	YES 87-710	IA12C 31 T1 S1	LOWER WING PRESSURE	1.000	26.850	.719	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

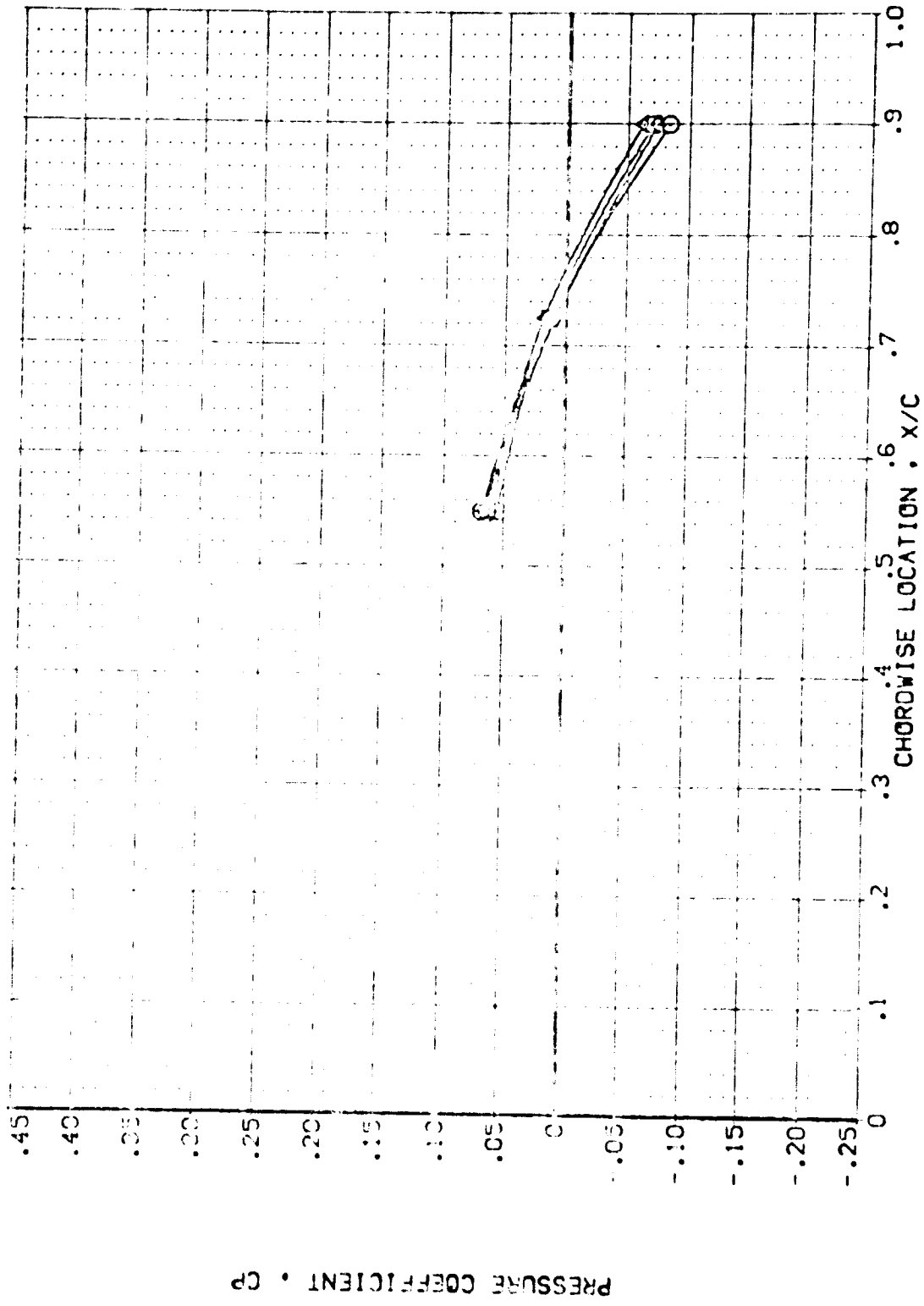
MACH = 3.000 ALPHA = -8.000 Y/B = .427

PAGE 254

DATA SET 310000
 (LULC00) Q
 (LULC01) X
 (LULC02) X
 (LULC03) X
 (LULC04) X

COMPUTATION DESCRIPTION
 AFS 87-710 1A12C 0 11 51 LOWER WING PRESSURE
 AFS 87-710 1A12C 0 11 51 LOWER WING PRESSURE
 AFS 87-710 1A12C 0 11 54 LOWER WING PRESSURE
 AFS 87-710 1A12C 0 11 54 LOWER WING PRESSURE

Q/R 0.000 0.000 0.000 0.000
 ST PR 0.000 0.000 0.000 0.000
 ST PR 0.000 0.000 0.000 0.000
 ST PR 0.000 0.000 0.000 0.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

DATA SET SYMBOL

(LBZ038)
(LBZ041)
(LBZ073)
(LBZ074)

CONFIGURATION DESCRIPTION

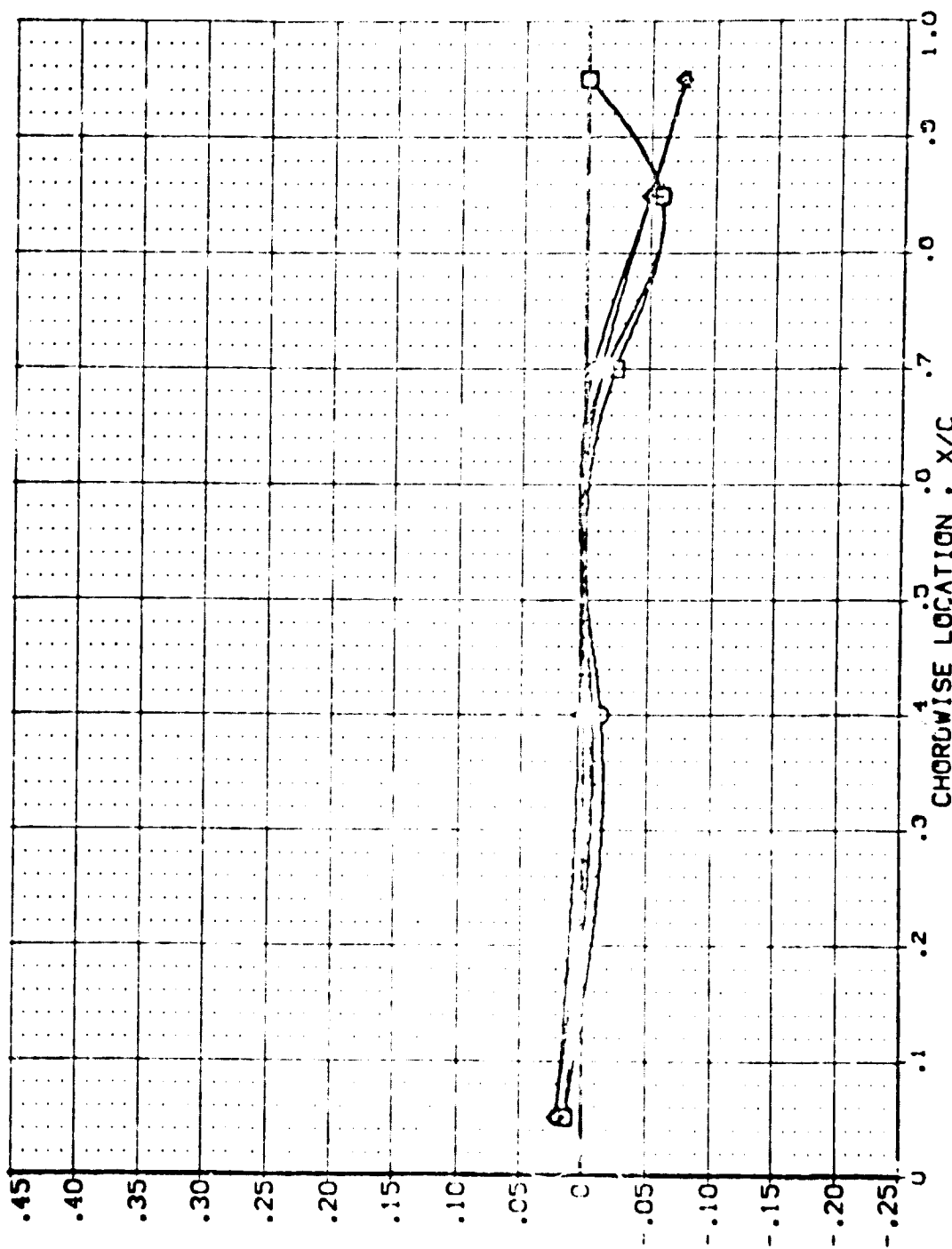
AMES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE

POWER 0.000
1.000
1.000
1.000
1.000

SR-PR 0.768
0.768
0.768
0.768
0.768

GIMBAL 1.000
1.000
1.000
1.000
1.000

PRESSURE COEFFICIENT, CP



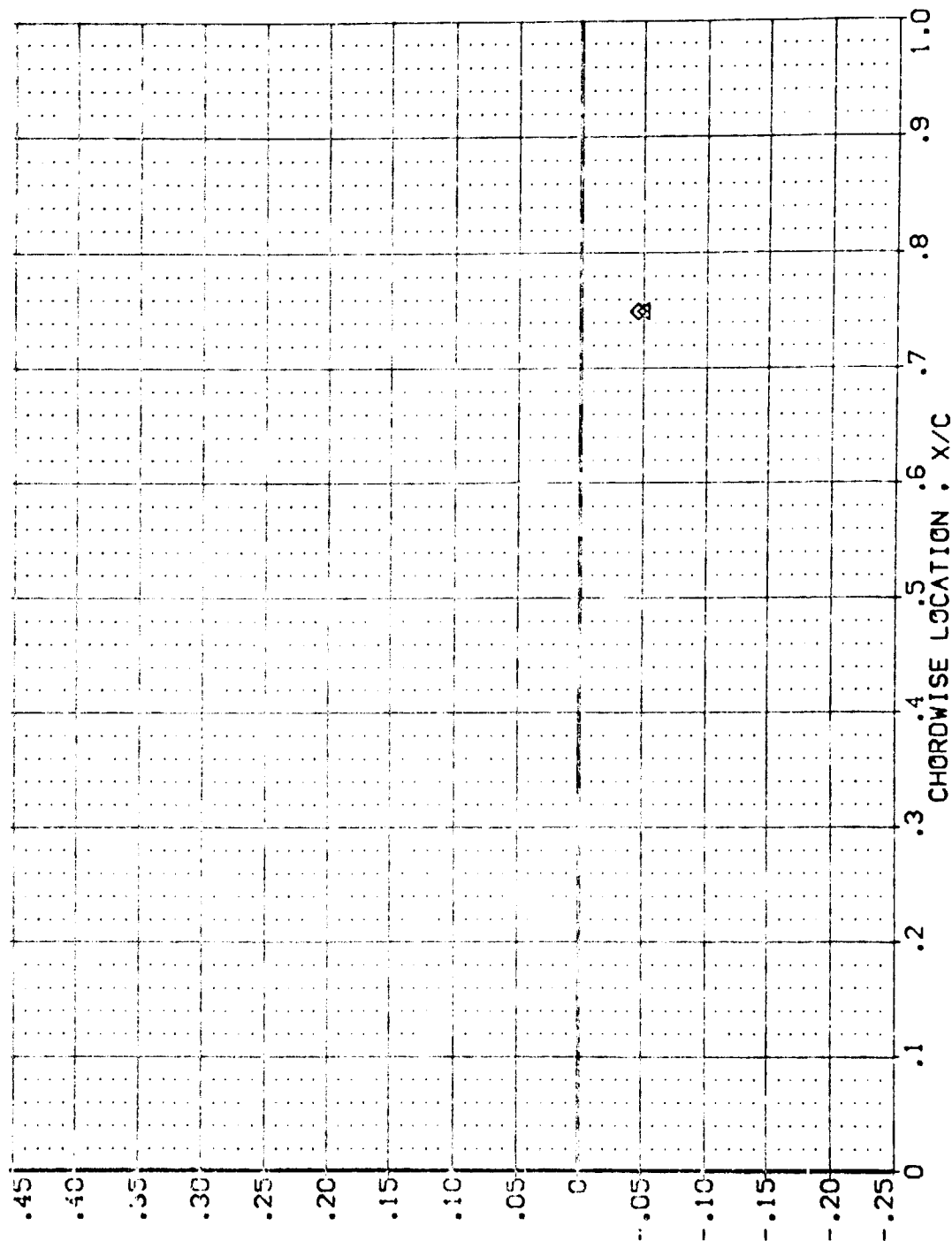
PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/PR S/WPR GINBAL

AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

.000
 1.000
 .733
 1.000
 26.860
 1.000
 26.860
 .768
 1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .780

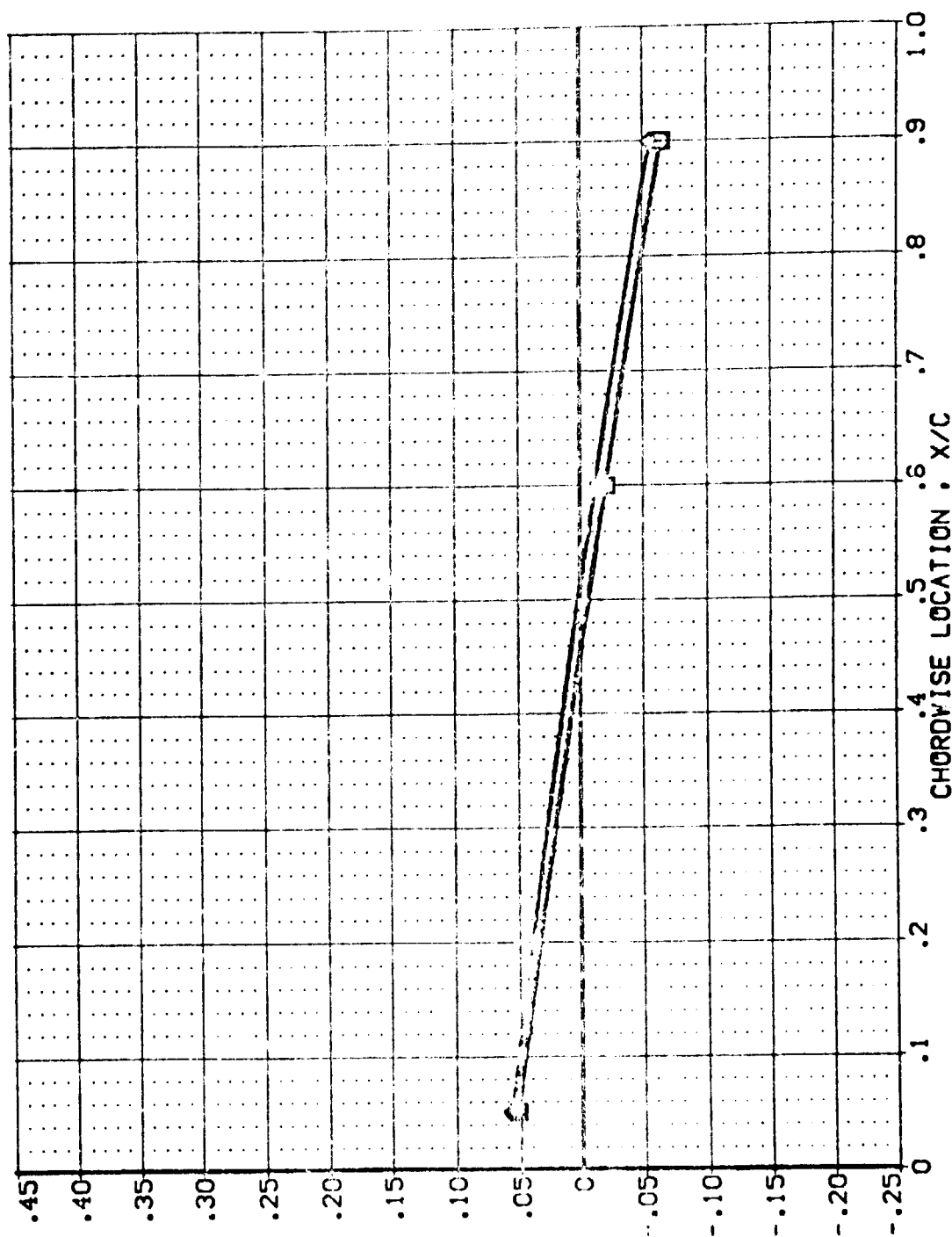
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/F S/F GIMBAL

(LBZ008) AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE .000 26.960 .768 1.000

(LBZ041) AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 26.960 .768 1.000

(LBZ075) AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE .000 26.960 .768 1.000

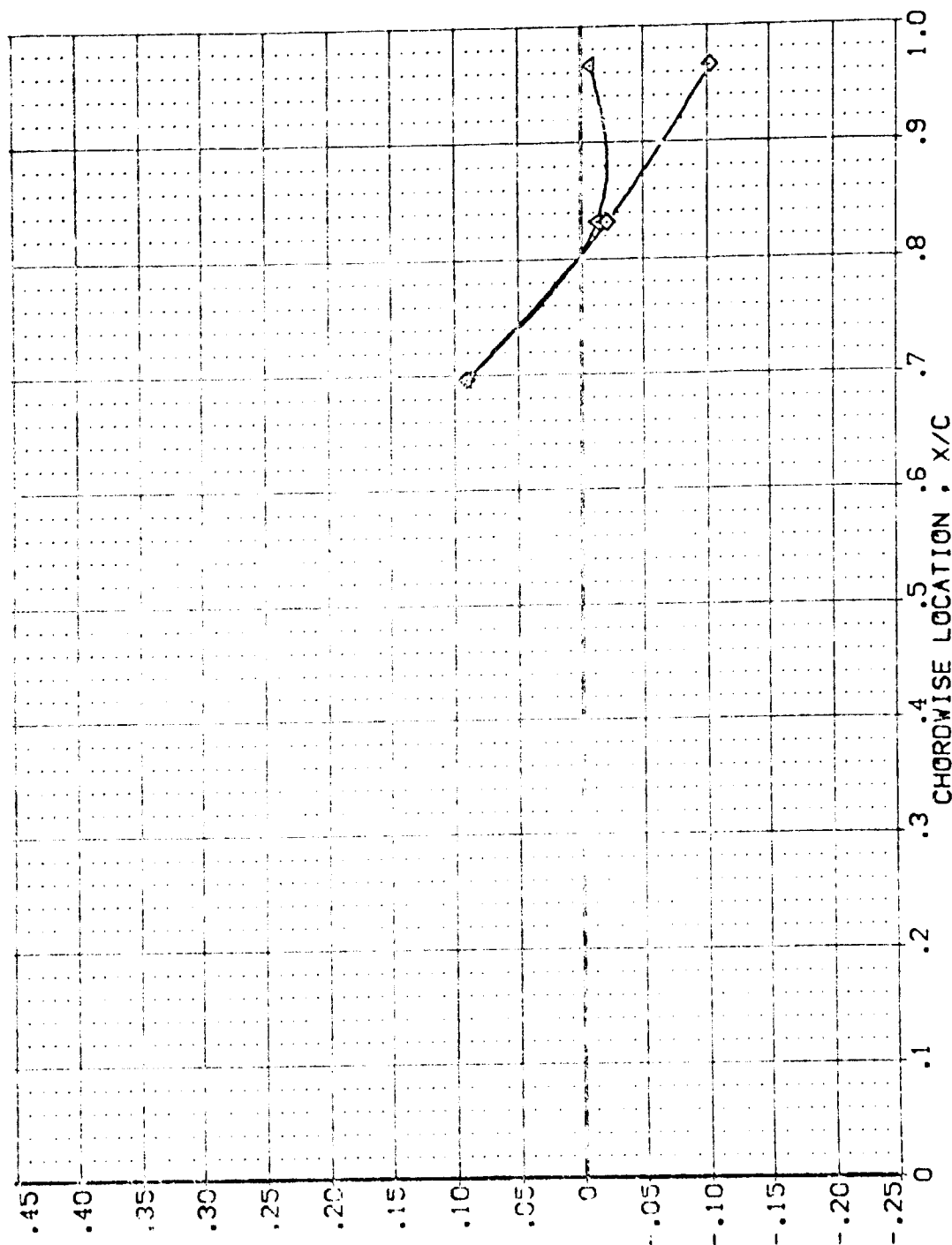
(LBZ074) AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 26.960 .768 1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CPR	CYPR	GPRBAL
(L8-023)	AVES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE	.000	26.050	.758	1.000
(L8-041)	AVES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE	1.000	26.050	.758	1.000
(L8-073)	AVES 87-710 IAL2C 01 T1 S4 LOWER WING PRESSURE	.000	26.050	.758	1.000
(L8-074)	AVES 87-710 IAL2C 01 T1 S4 LOWER WING PRESSURE	1.000	26.050	.758	1.000



PRESSURE COEFFICIENT • CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .299 PAGE 259

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB00038)
(LB00041)
(LB00075)
(LB00074)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01
IA12C 01
IA12C 01
IA12C 01

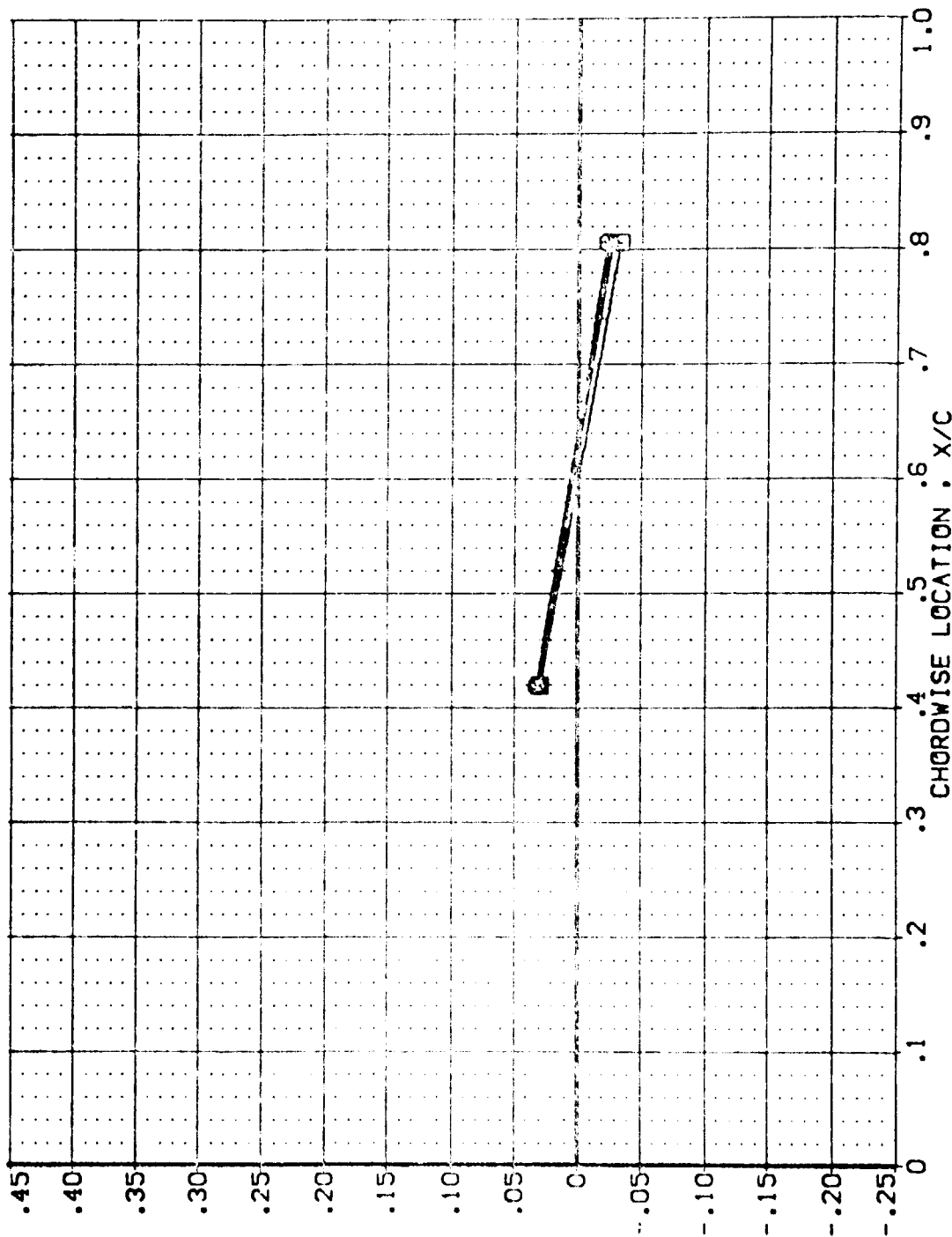
TI S1
TI S1
TI S1
TI S1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER 1.000
POWER 1.000
POWER 1.000
POWER 1.000

QPR 26.650
QPR 26.650
QPR 26.650
QPR 26.650

GINBAL 1.000
GINBAL 1.000
GINBAL 1.000
GINBAL 1.000

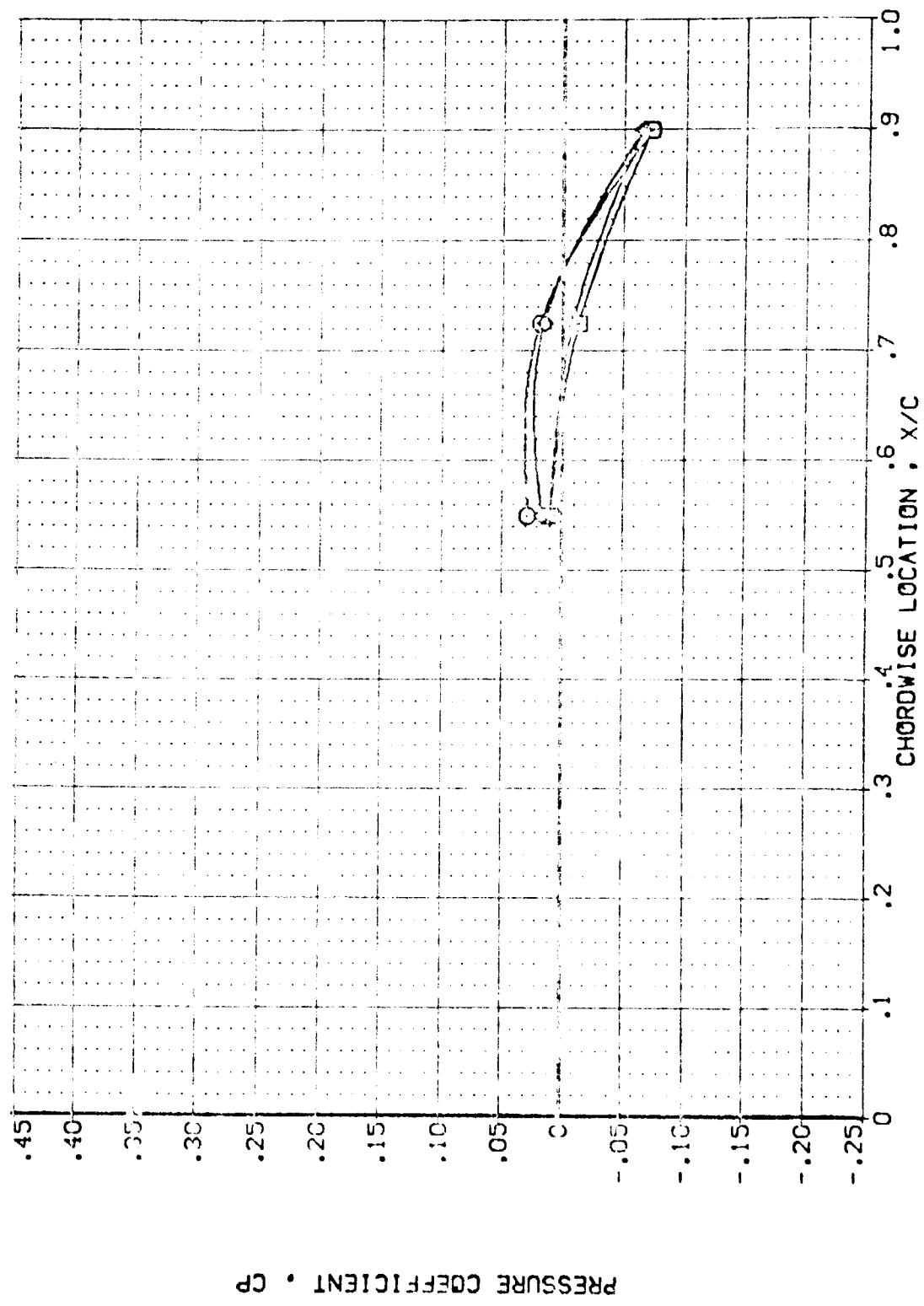


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .427

DATA SET 5732L CONFIGURATION DESCRIPTION

CONFIGURATION	LOWER WING PRESSURE	POWER	DBR	SRMR	GLIBAL
AVES 87-710	1A12C 01 T1 S1	.000	26.060	.768	1.000
(LB0038)		1.000			1.000
AVES 87-710	1A12C 01 T1 S1	.000	26.050	.763	1.000
(LB0041)		1.000			1.000
AVES 87-710	1A12C 01 T1 S1	.000			1.000
(LB0075)		1.000			1.000
AVES 87-710	1A12C 01 T1 S1	.000			1.000
(LB0074)		1.000			1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

DATA SET SYMBOL

(LB20038)
(LB20041)
(LB20075)
(LB20074)

CONFIGURATION DESCRIPTION

AVES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAL2C 01 T1 S4 LOWER WING PRESSURE
AVES 87-710 IAL2C 01 T1 S4 LOWER WING PRESSURE

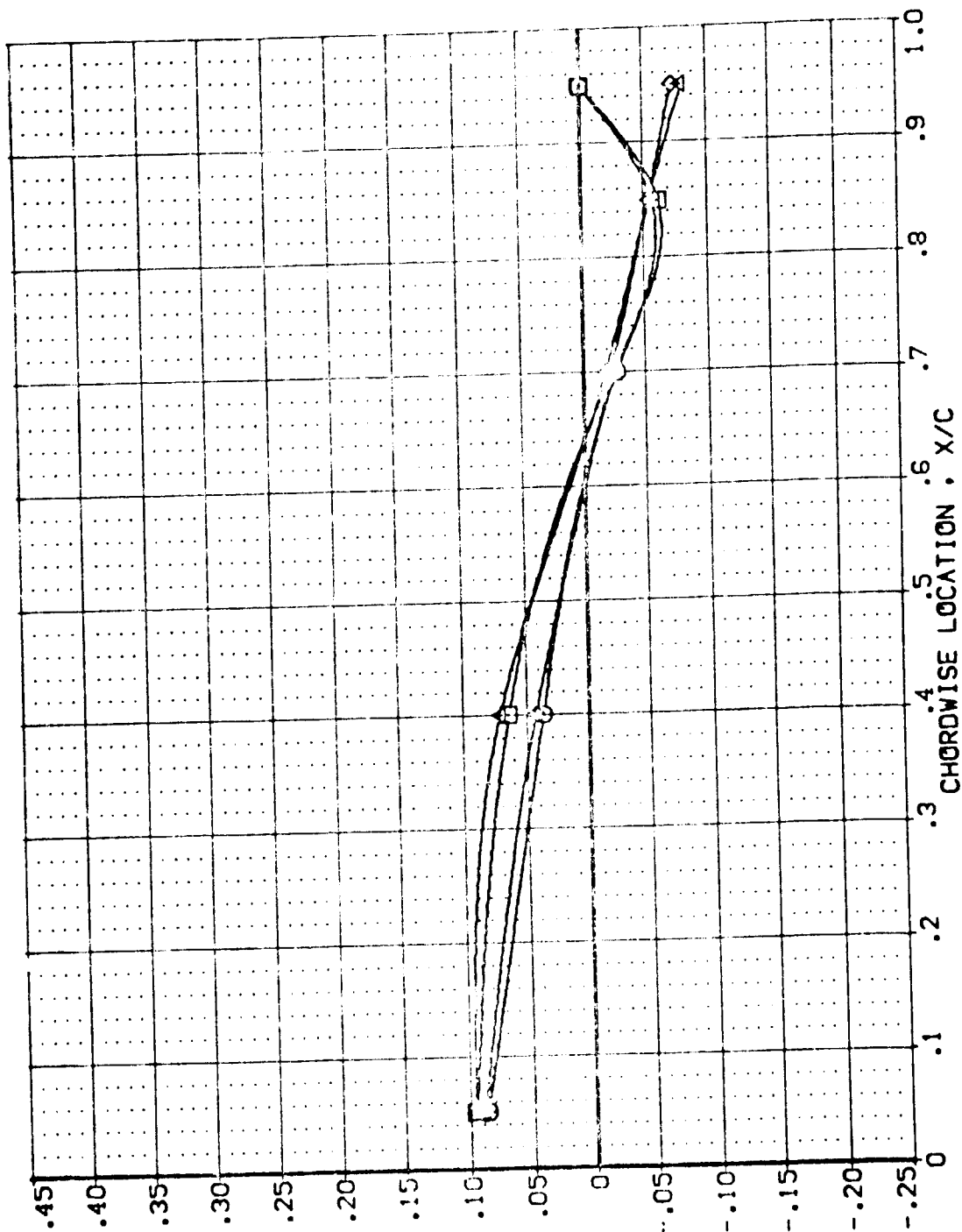
POWER 1.000
1.000
1.000
1.000

CFR 26.860
26.860

SETR .768
.768

GIMBAL 1.000
1.000
1.000
1.000

PRESSURE COEFFICIENT, CP



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .673

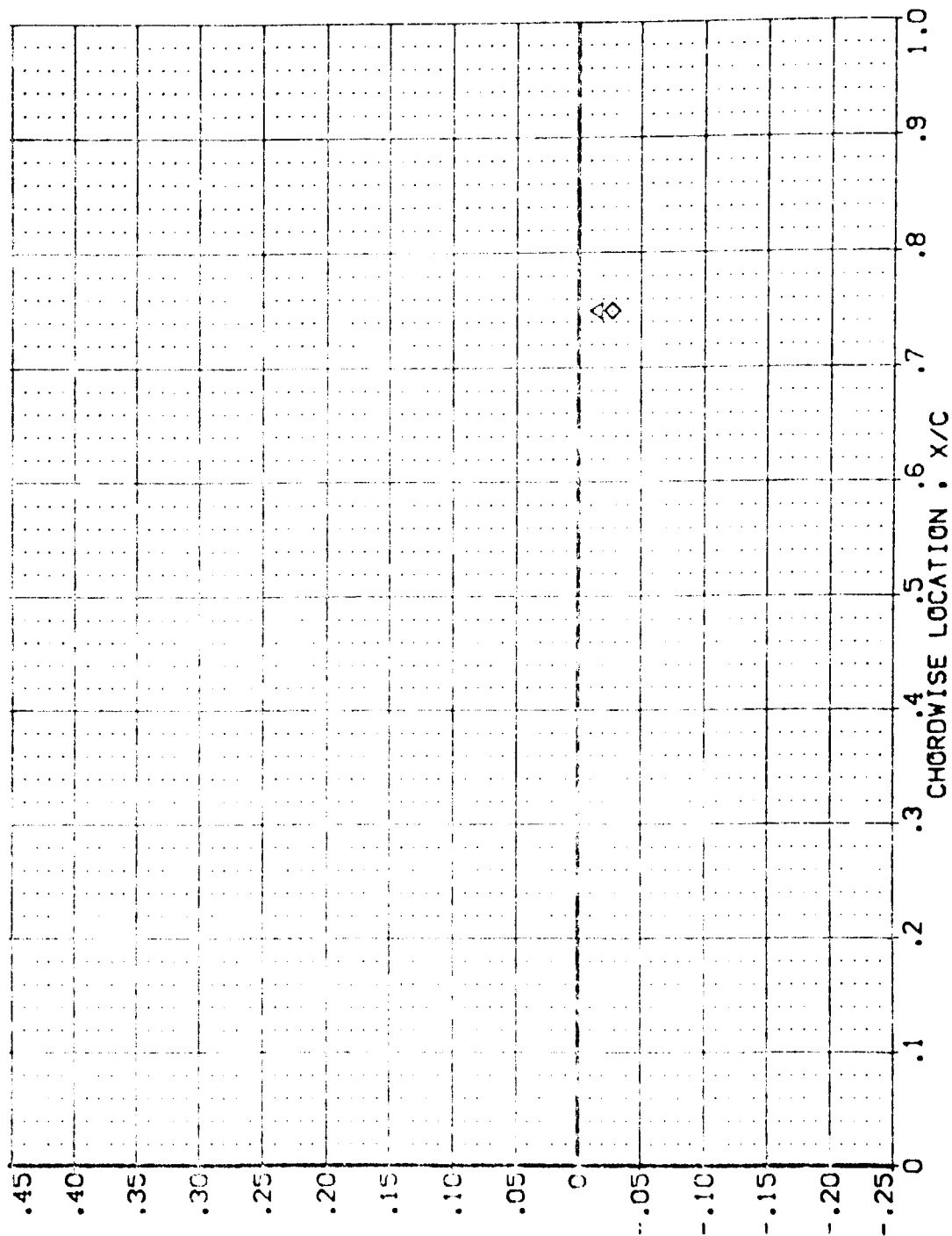
DATA SET SERIAL CONFIGURATION DESCRIPTION POWER Q/R SQRPR SIGNAL

(L8-008) ASES 87-710 [A] [Z] [0] [1] [5] LOWER WING PRESSURE .000 26.860 .768 1.000

(L8-041) ASES 87-710 [A] [Z] [0] [1] [5] LOWER WING PRESSURE 1.000 26.860 .768 1.000

(L8-075) ASES 87-710 [A] [Z] [0] [1] [5] LOWER WING PRESSURE .000 26.860 .768 1.000

(L8-074) ASES 87-710 [A] [Z] [0] [1] [5] LOWER WING PRESSURE 1.000 26.860 .768 1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .780 PAGE 263

DATA SET SYMBOL

(LB2008)
(LB2041)
(LB2075)
(LB2074)

AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

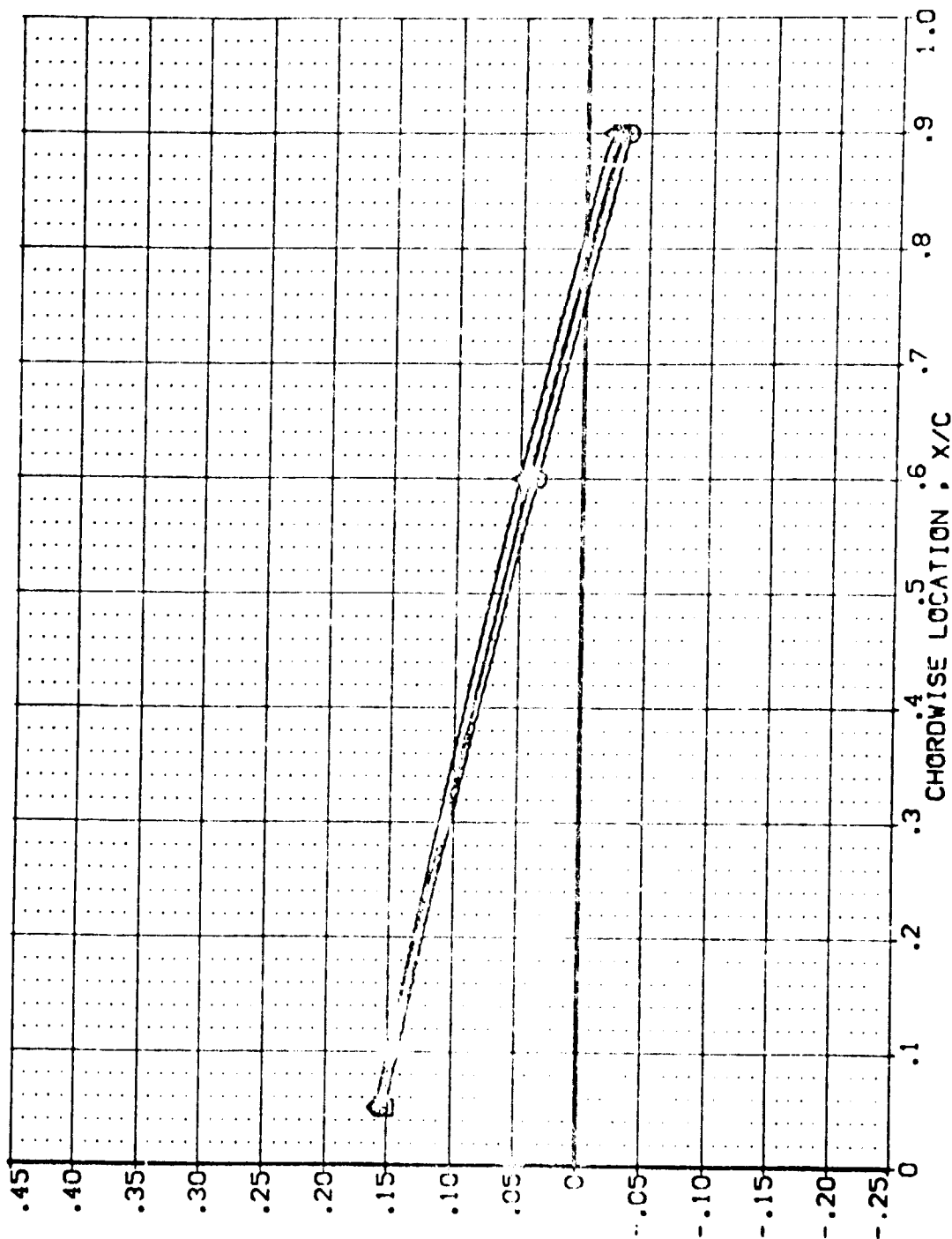
LA12C 01 T1 S1
LA12C 01 T1 S1
LA12C 01 T1 S1
LA12C 01 T1 S1

POWER
.000
1.000
1.000
1.000

QPR
26.850
26.850
26.850

SRPR
.768
.768
.768

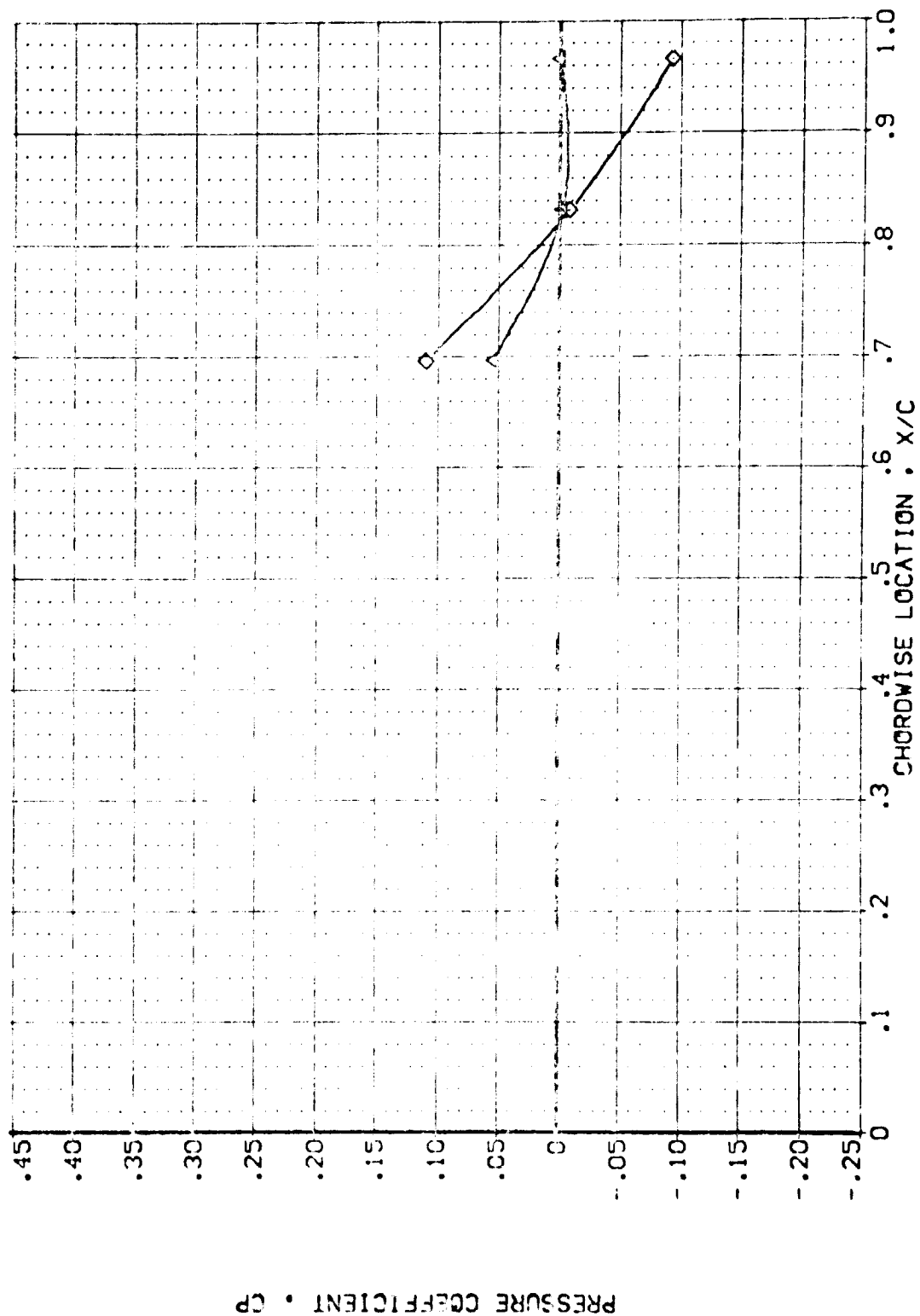
GIMBAL
1.000
1.000
1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .887

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	DPR	SSPR	GIMBAL
(L8.003)	AVES 87-710 [A]2C 01 T1 S1	.000			1.000
(L8.004)	AVES 87-710 [A]2C 01 T1 S1	1.000	25.050	.768	1.000
(L8.005)	AVES 87-710 [A]2C 01 T1 S1	.000			1.000
(L8.006)	AVES 87-710 [A]2C 01 T1 S1	1.000	26.050	.768	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .299

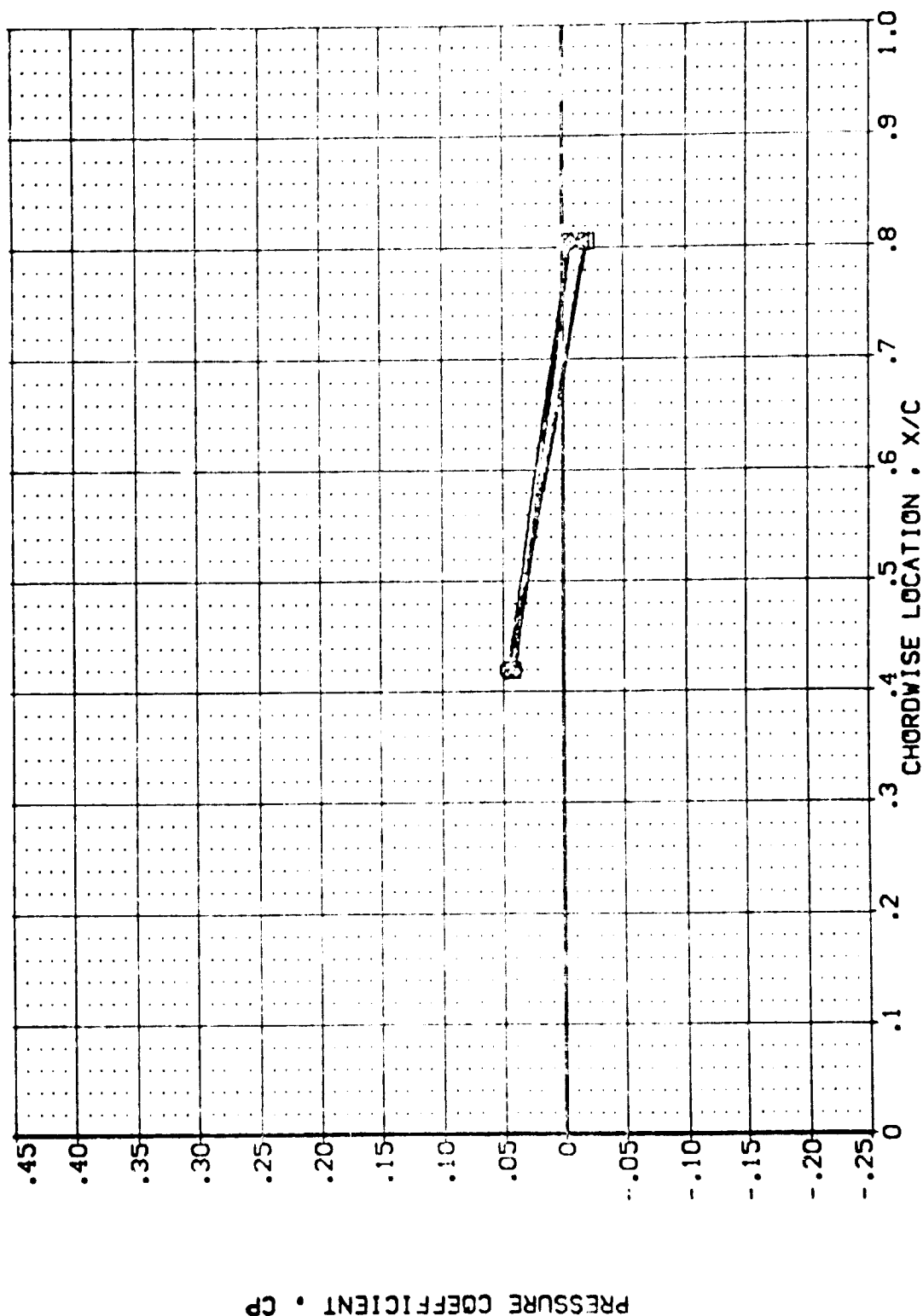
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER Q/R SRPR G/HBAL

(LB2038) ASES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE .000 26.860 .768 1.000

(LB2041) ASES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE 1.000 26.860 .768 1.000

(LB2073) ASES 87-710 IAL2C 01 T1 S4 LOWER WING PRESSURE .000 26.860 .768 1.000

(LB2074) ASES 87-710 IAL2C 01 T1 S4 LOWER WING PRESSURE 1.000 26.860 .768 1.000

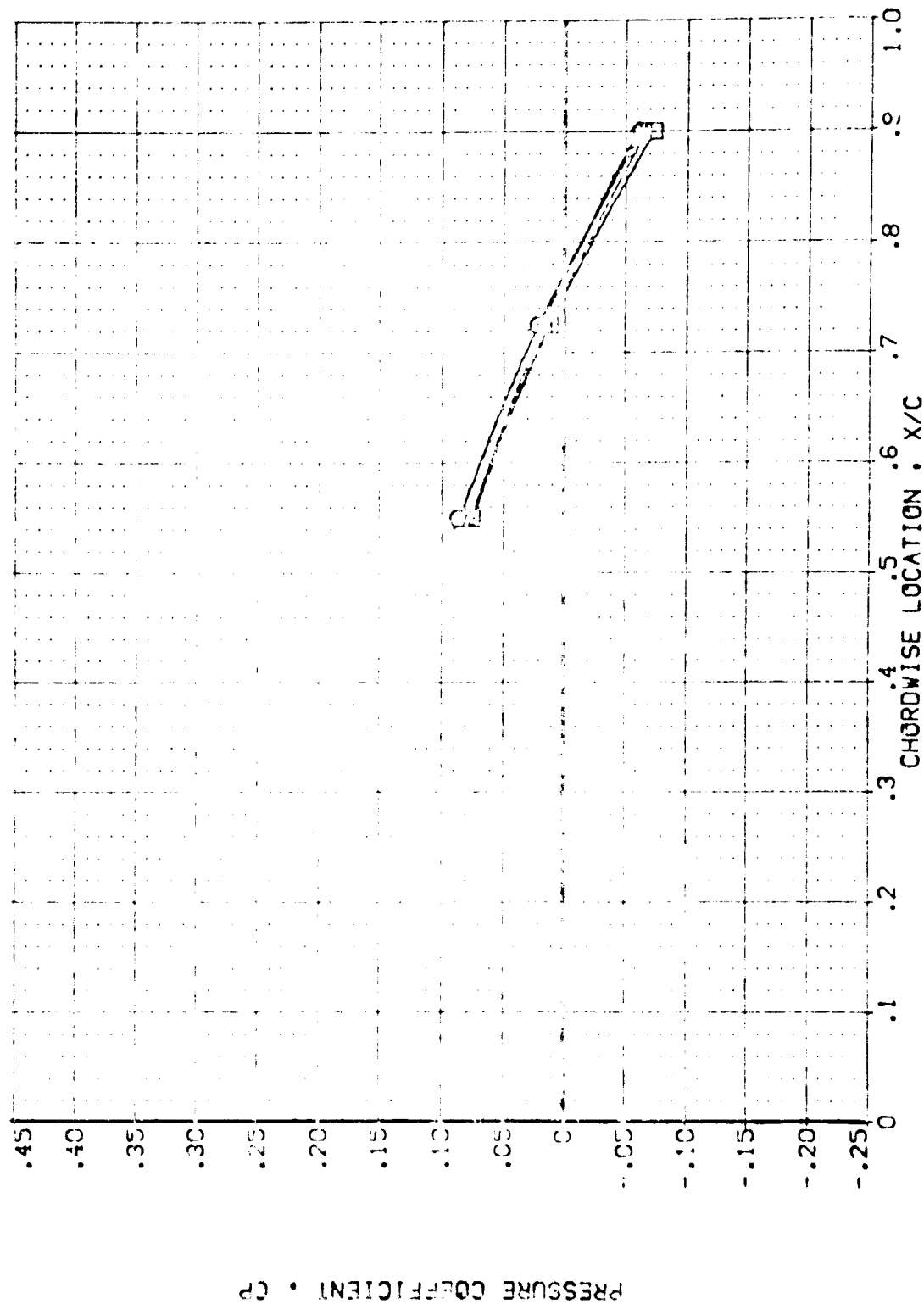


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .427

PAGE 266

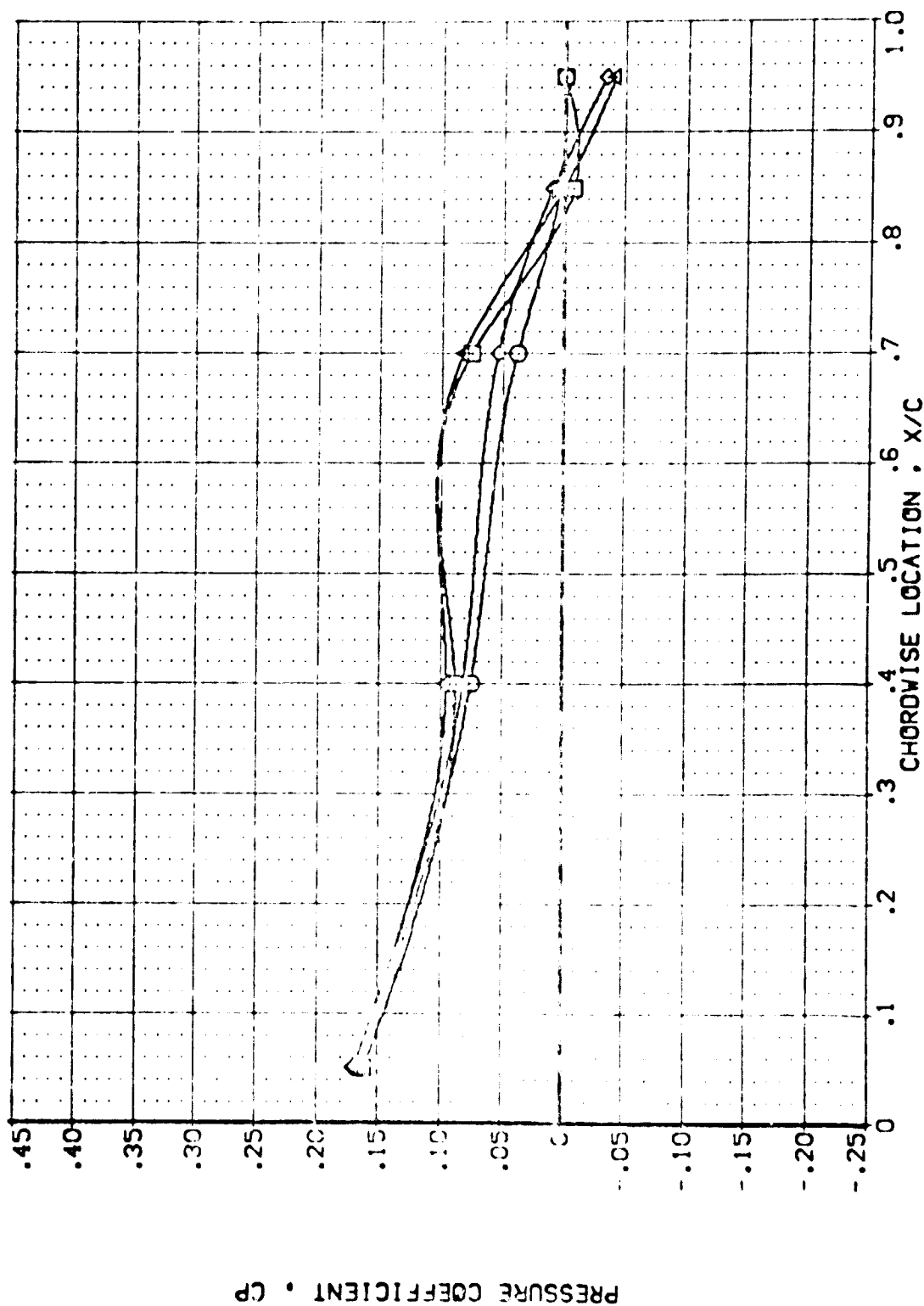
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	C/R	S/P PR	G/P BAL
(UB-008)	AMES 87-710 [AL2C 01 T] SI LOWER WING PRESSURE	.000	26.950	.788	1.000
(UB-009)	AMES 87-710 [AL2C 01 T] SI LOWER WING PRESSURE	1.000	26.950	.788	1.000
(UB-010)	AMES 87-710 [AL2C 01 T] SI LOWER WING PRESSURE	.000	26.060	.788	1.000
(UB-011)	AMES 87-710 [AL2C 01 T] SI LOWER WING PRESSURE	1.000	26.060	.788	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .534

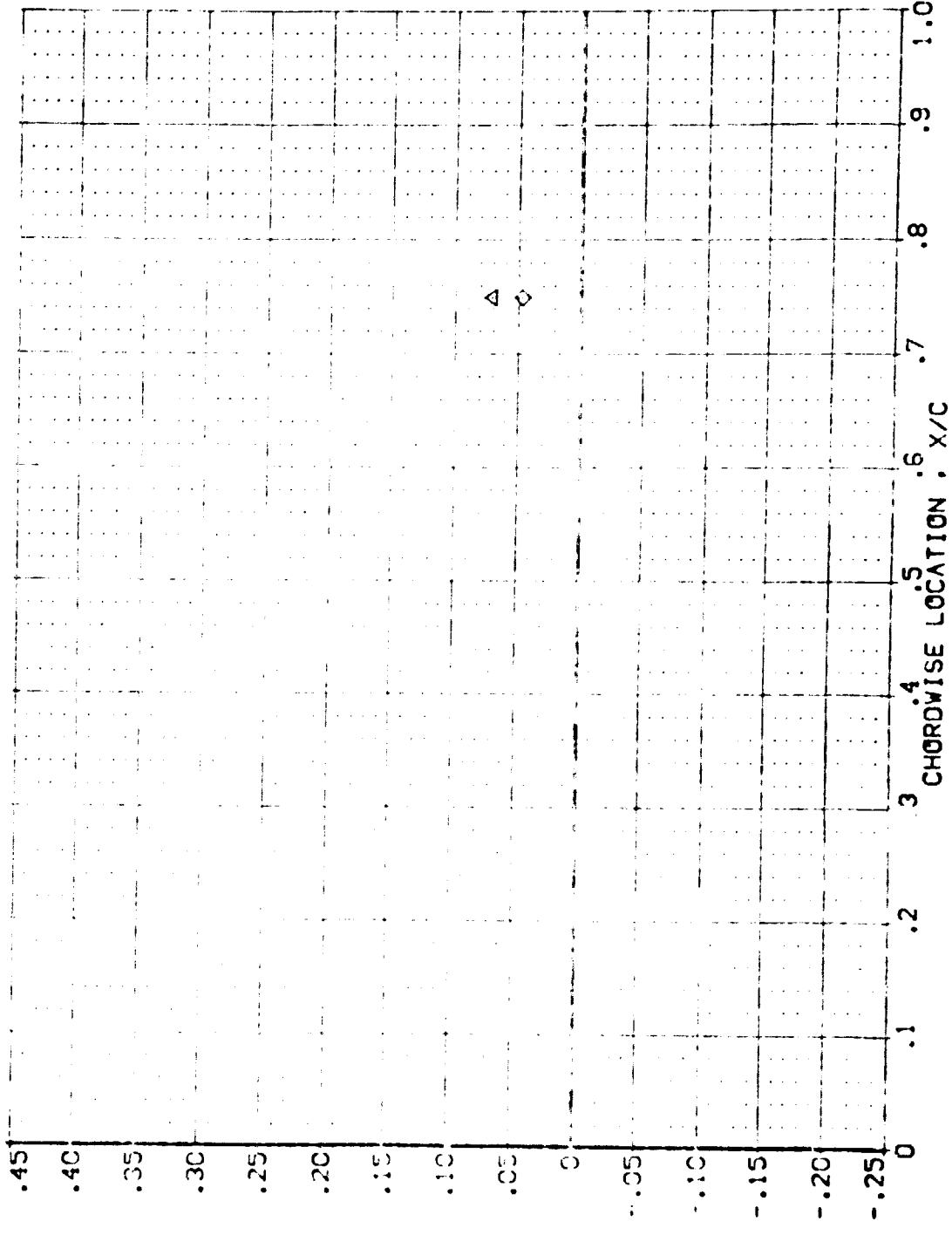
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	QPR	SNRPR	GILBAL
(LBZ0038)	AMES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE	.000	26.860	.768	.000
(LBZ041)	AMES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE	1.000	26.860	.768	.000
(LBZ075)	AMES 87-710 IAI2C 01 TI SA LOWER WING PRESSURE	.000	26.860	.768	.000
(LBZ074)	AMES 87-710 IAI2C 01 TI SA LOWER WING PRESSURE	1.000	26.860	.768	.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .673

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SAS PR	GRIDAL
(LH 023)	AVES 87-710 1A12C 01	1.000	26.660	.758	1.000
(LH 024)	AVES 87-710 1A12C 01	1.000	26.660	.758	1.000
(LH 025)	AVES 87-710 1A12C 01	1.000	26.660	.758	1.000
(LH 026)	AVES 87-710 1A12C 01	1.000	26.660	.758	1.000

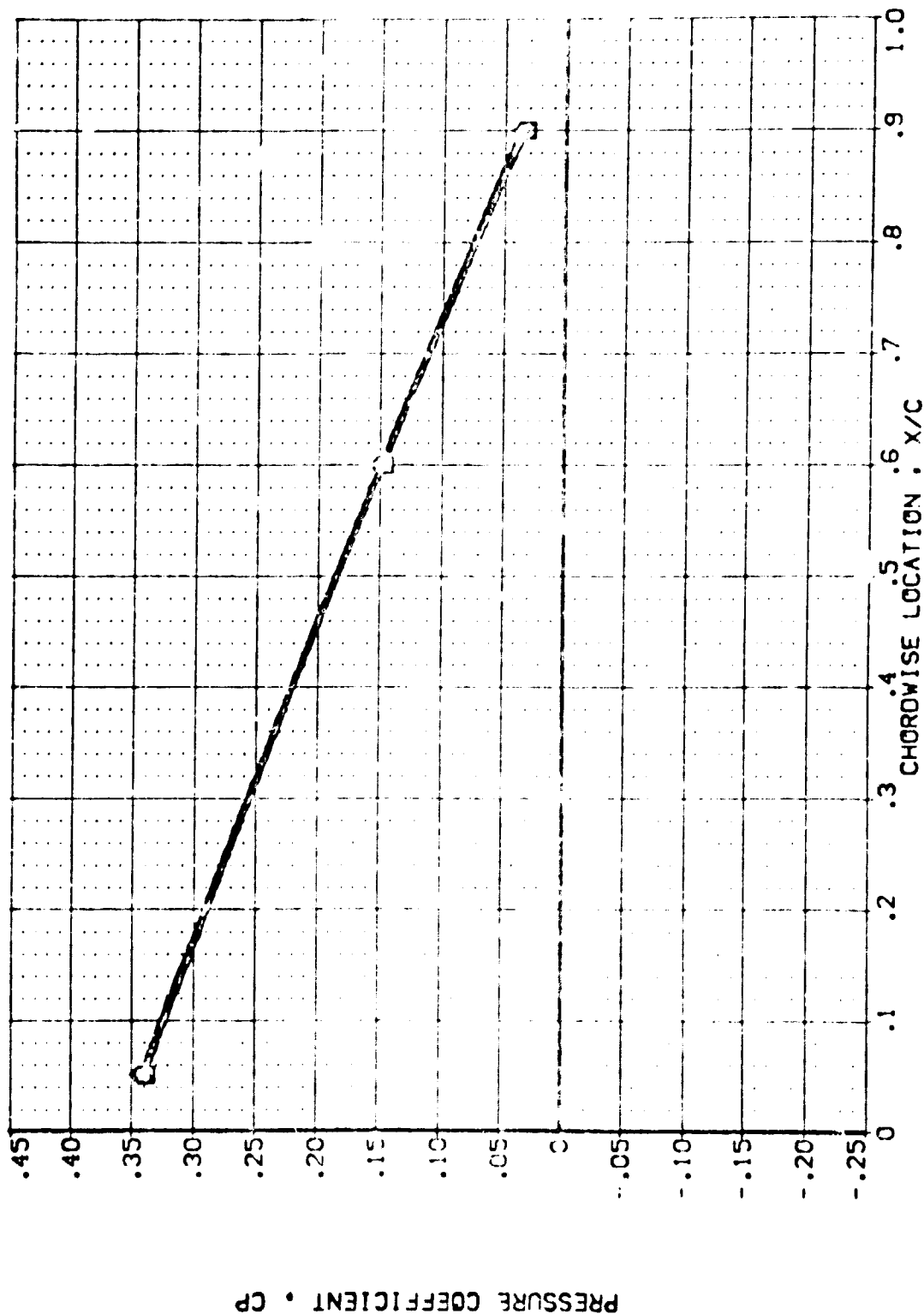


PRESSURE COEFFICIENT • CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING 30110M

DATA SET SYMBOL CONFIGURATION DESCRIPTION

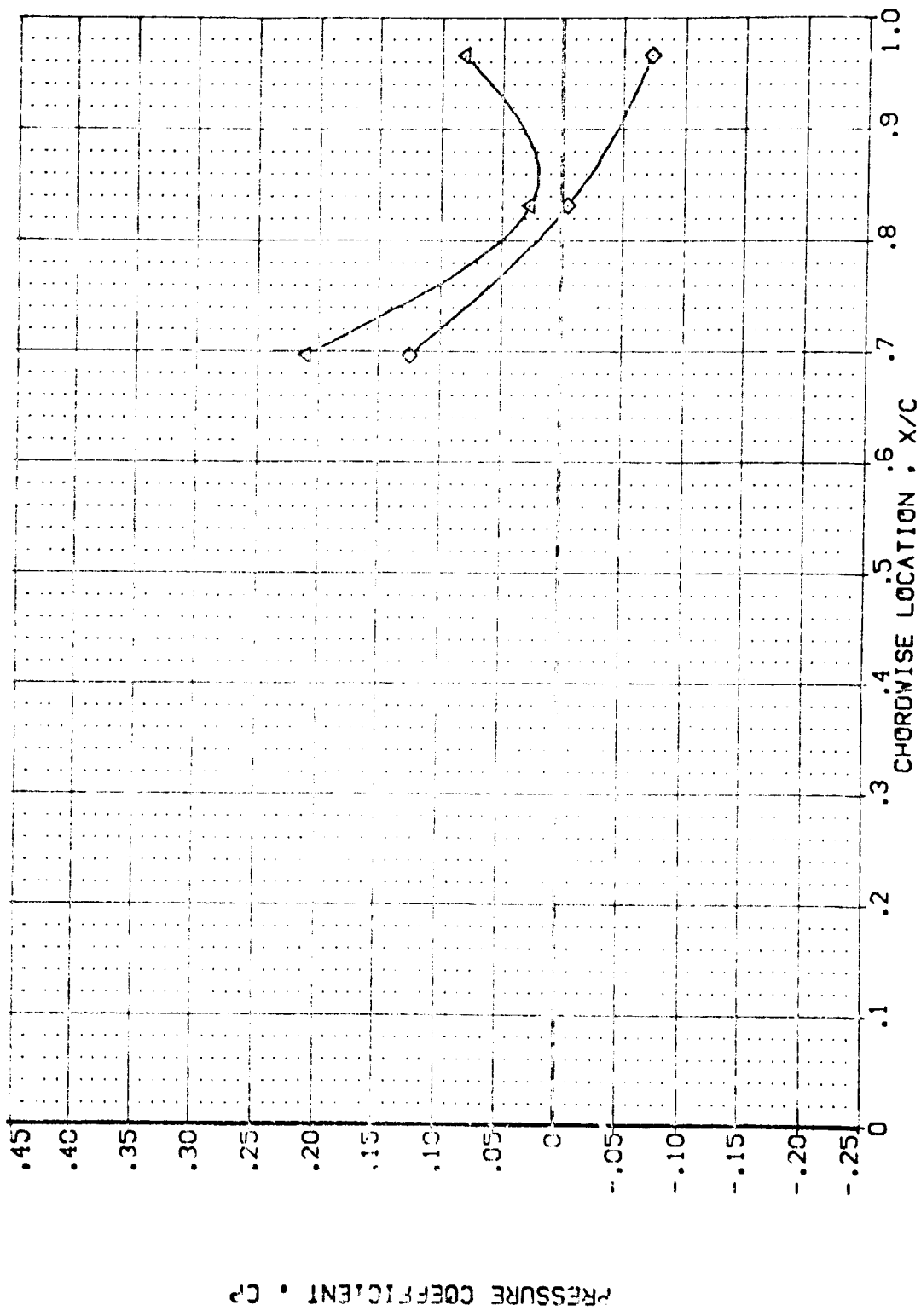
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CTR	SUPR	QIMBAL
(LBZD38)	AVES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LBZD41)	AVES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE	1.000	25.860	.768	1.000
(LBZD73)	AVES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LBZD74)	AVES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE	1.000	25.860	.768	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	C/R	SRPR	GIMBAL
(L82D46)	AVES 87-710 IAI 2C 01 T1 S1 LOWER WING PRESSURE	.001			1.000
(L82D50)	AVES 87-710 IAI 2C 01 T1 S1 LOWER WING PRESSURE	1.000	23.850	.826	1.000
(L82D71)	AVES 87-710 IAI 2C 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(L83D75)	AVES 87-710 IAI 2C 01 T1 S1 LOWER WING PRESSURE	1.000	23.050	.826	1.000



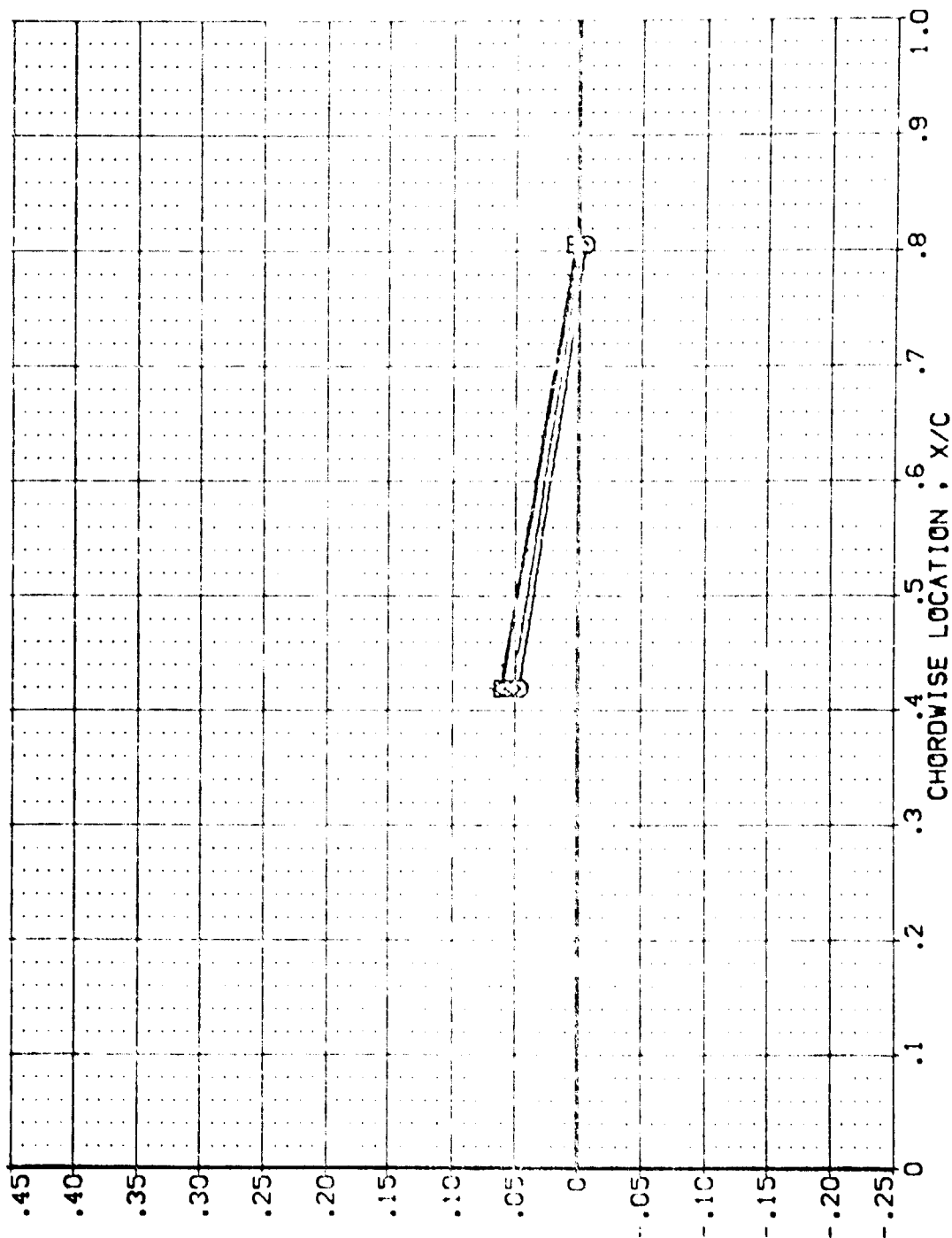
PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZ046) AYES 87-710 [A] [Z] [C] [I] [T] [I] [S] [I]
 (LBZ050) AYES 87-710 [A] [Z] [C] [I] [T] [I] [S] [I]
 (LBZ077) AYES 87-710 [A] [Z] [C] [I] [T] [I] [S] [I]
 (LBZ076) AYES 87-710 [A] [Z] [C] [I] [T] [I] [S] [I]

POWER CTR SCTR GIBAL
 .000 23.860 1.000
 1.000 23.860 .826
 1.000 23.860 .826

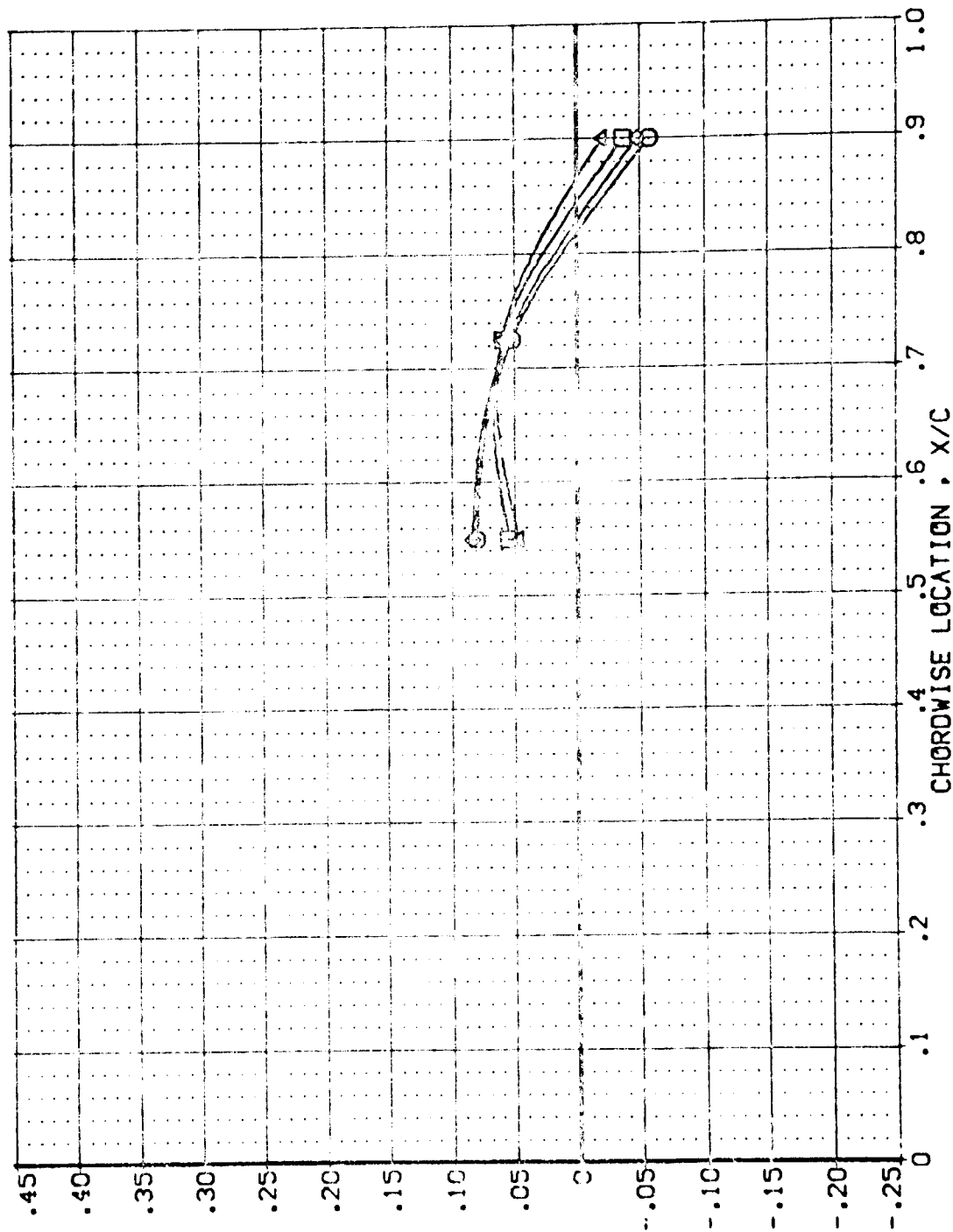
LOWER WING PRESSURE
 LOWER WING PRESSURE
 LOWER WING PRESSURE



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	QFR	SCPR	GL:BDAL
(LR7016)	AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	.000	23.850	.826	1.000
(LR7017)	AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	1.000	23.850	.826	1.000
(LR7018)	AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	1.000	23.850	.826	1.000
(LR7019)	AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	1.000	23.850	.826	1.000

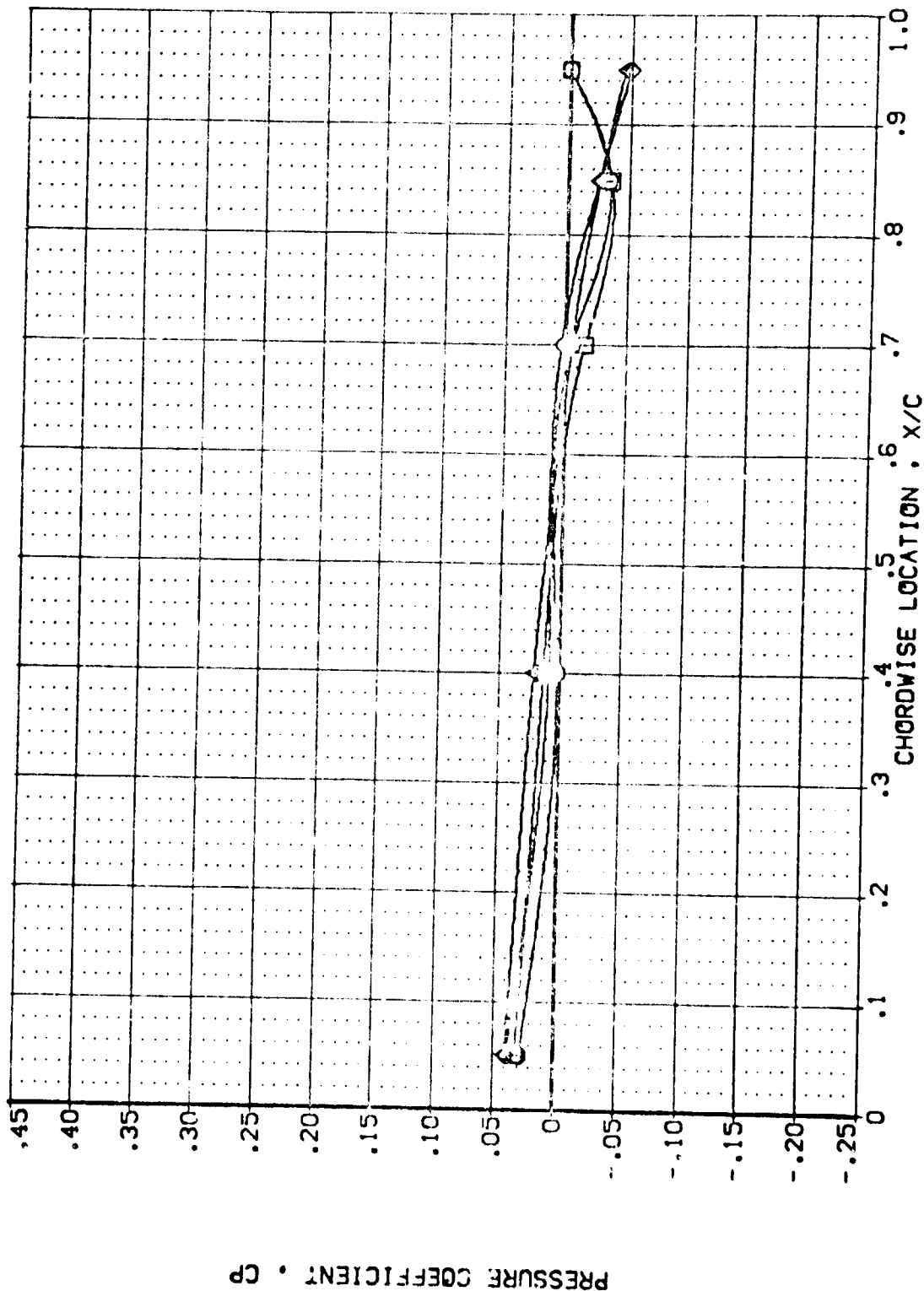


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .534 PAGE 273

DATA SET SYMBOL CONFIGURATION DESCRIPTION

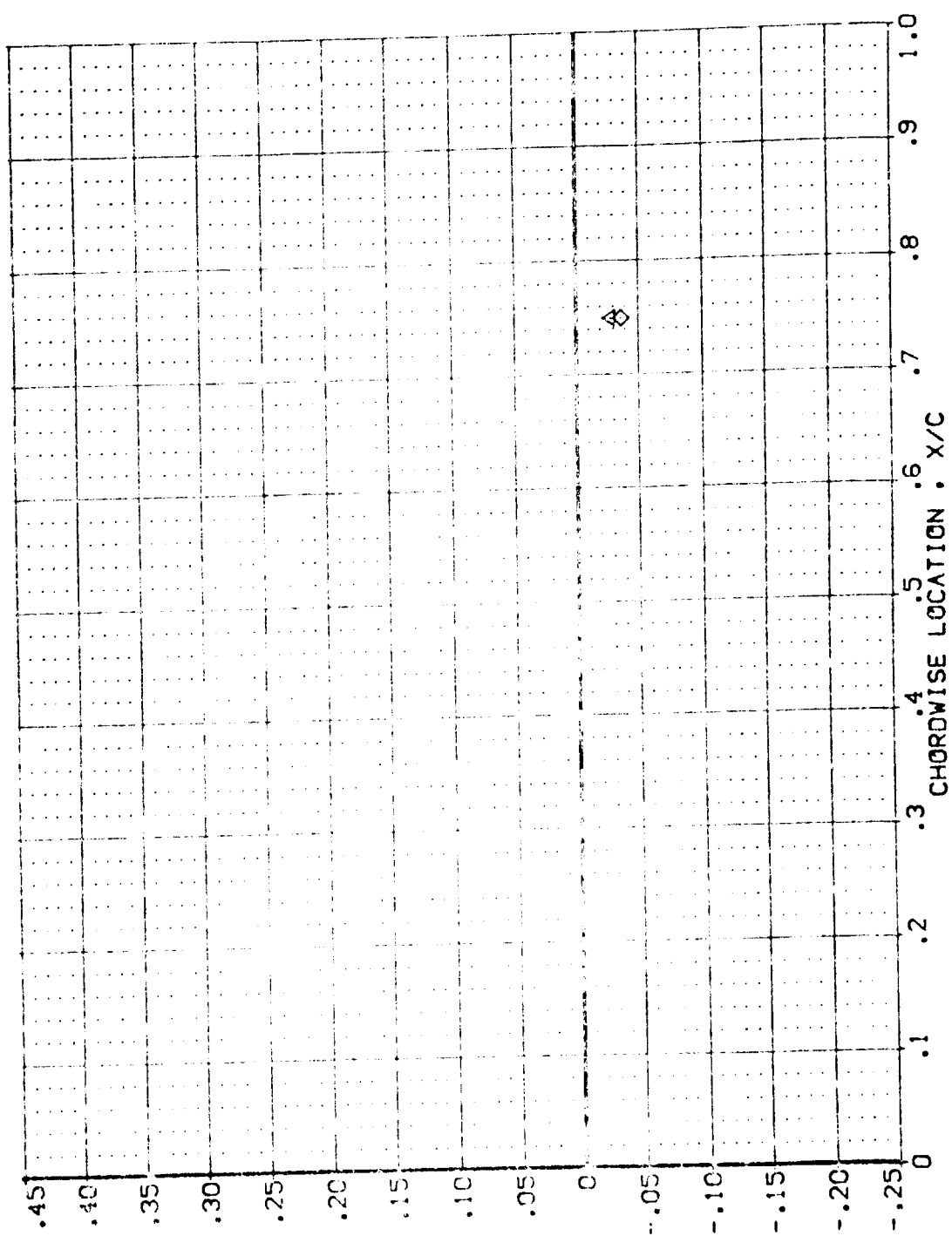
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	QFR	STPR	GIMBAL
(LB2046)	AMES 87-710 IAI2C 01 T1 S1	1.000	23.960	.826	1.000
(LB2050)	AMES 87-710 IAI2C 01 T1 S1	1.000	23.960	.826	1.000
(LB2077)	AMES 87-710 IAI2C 01 T1 S1	1.000	23.960	.826	1.000
(LB2076)	AMES 87-710 IAI2C 01 T1 S1	1.000	23.960	.826	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	C/R	STPR	Q/HBAL
(LBZ046)	AVES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE	.000	23.660	.826	1.000
(LBZ050)	AVES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE	1.000	23.660	.826	1.000
(LBZ077)	AVES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LBZ076)	AVES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE	1.000	23.860	.826	1.000



PRESSURE COEFFICIENT • CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .780 PAGE 275

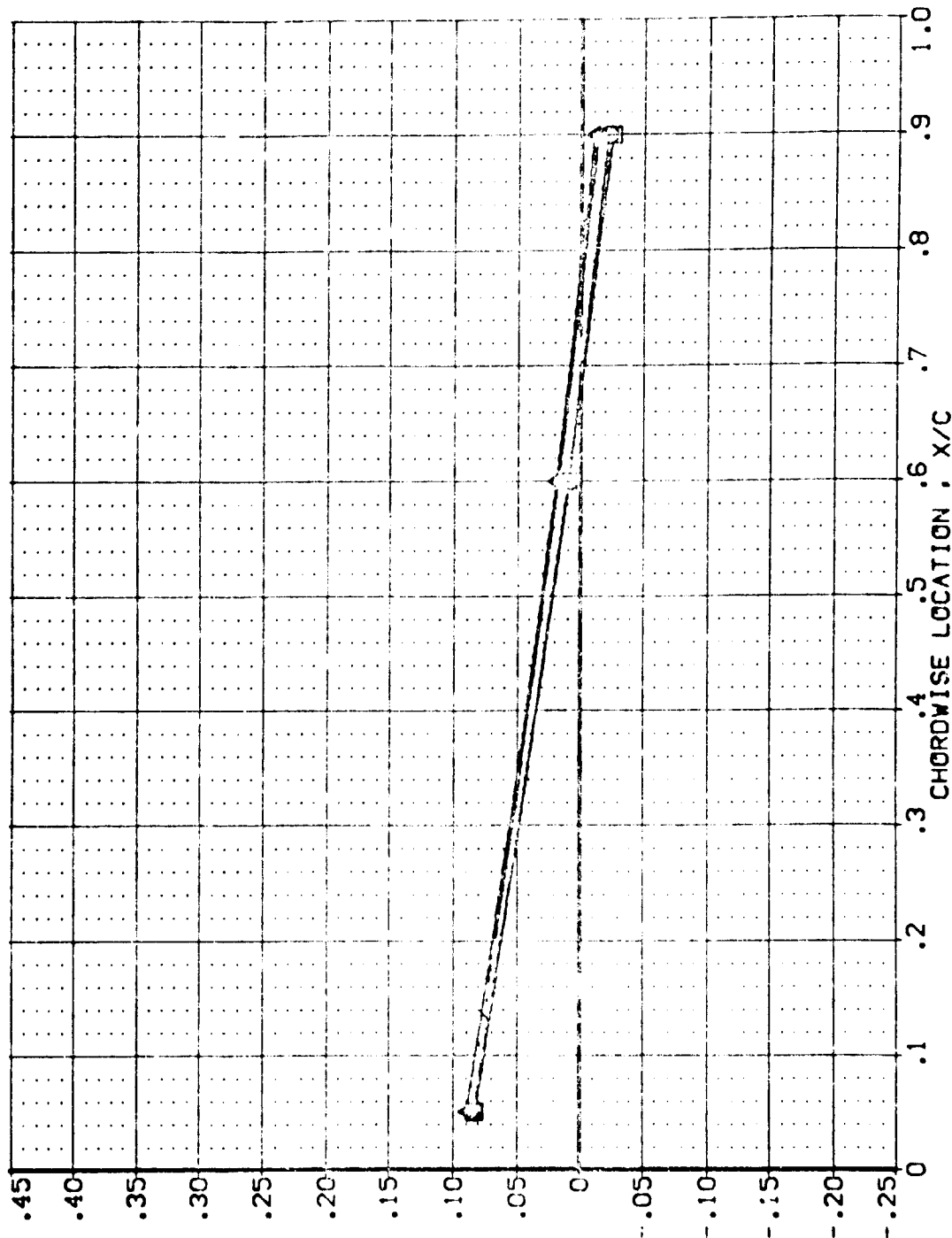
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER OFR SWPR GINBAL

(LB2046) AMES 87-710 IAI2C 01 T1 S1 .000 23.860 .826 1.000

(LB2050) AMES 87-710 IAI2C 01 T1 S1 1.000 23.860 .826 1.000

(LB2077) AMES 87-710 IAI2C 01 T1 S4 .000 23.860 .826 1.000

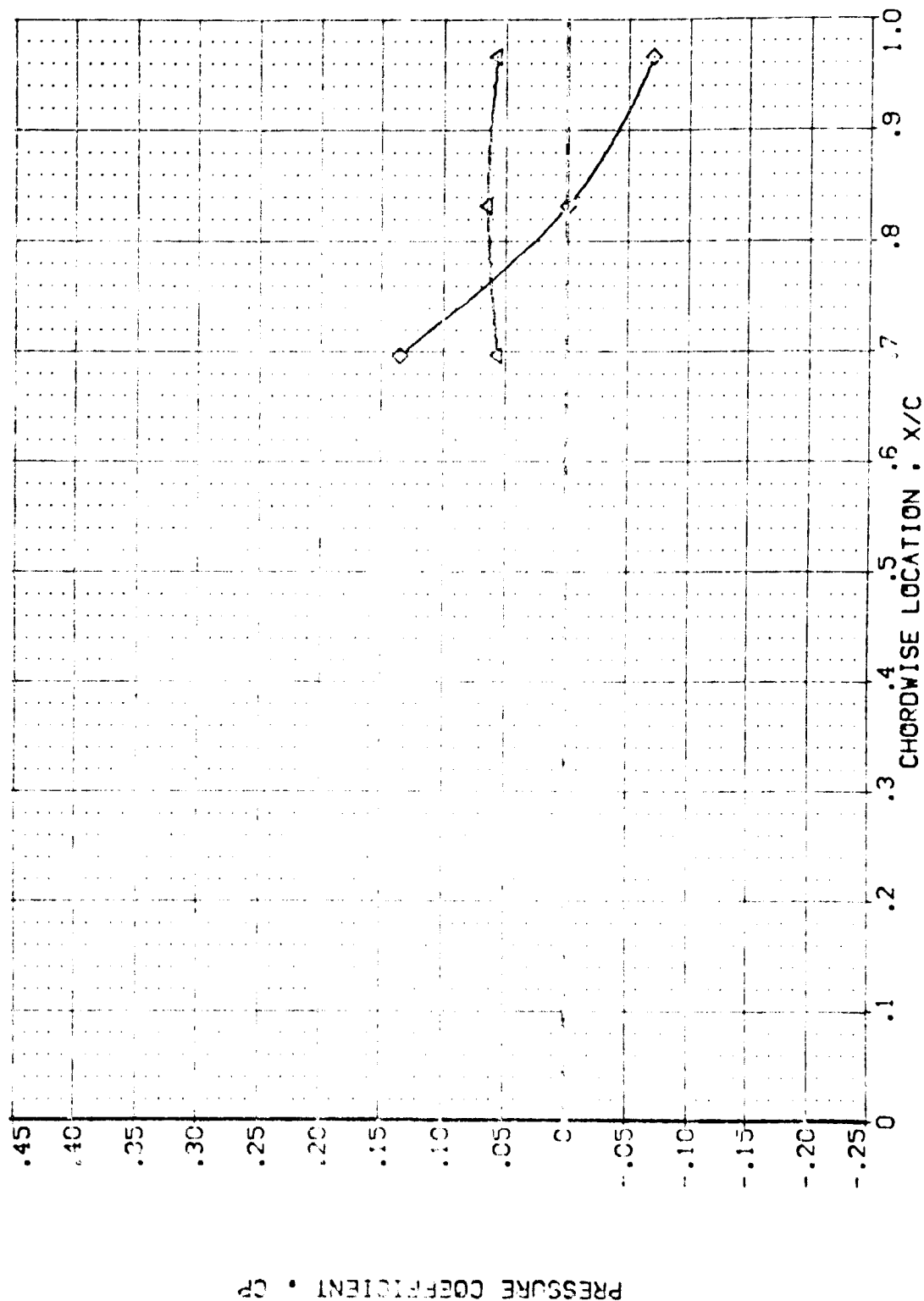
(LB2076) AMES 87-710 IAI2C 01 T1 S4 1.000 23.860 .826 1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	QPR	SRPR	QIBAL
1.07046	AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	.000	23.860	.826	1.000
1.07047	AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	1.000	23.860	.826	1.000
1.07048	AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	.000	23.860	.826	1.000
1.07049	AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	1.000	23.860	.826	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .299

DATA SET SYMBOL

(LB2046)
(LB2047)
(LB2048)
(LB2049)

CONFIGURATION DESCRIPTION

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

POWER

0.00
1.000
1.000
1.000

G/M

23.860
23.860
23.860
23.860

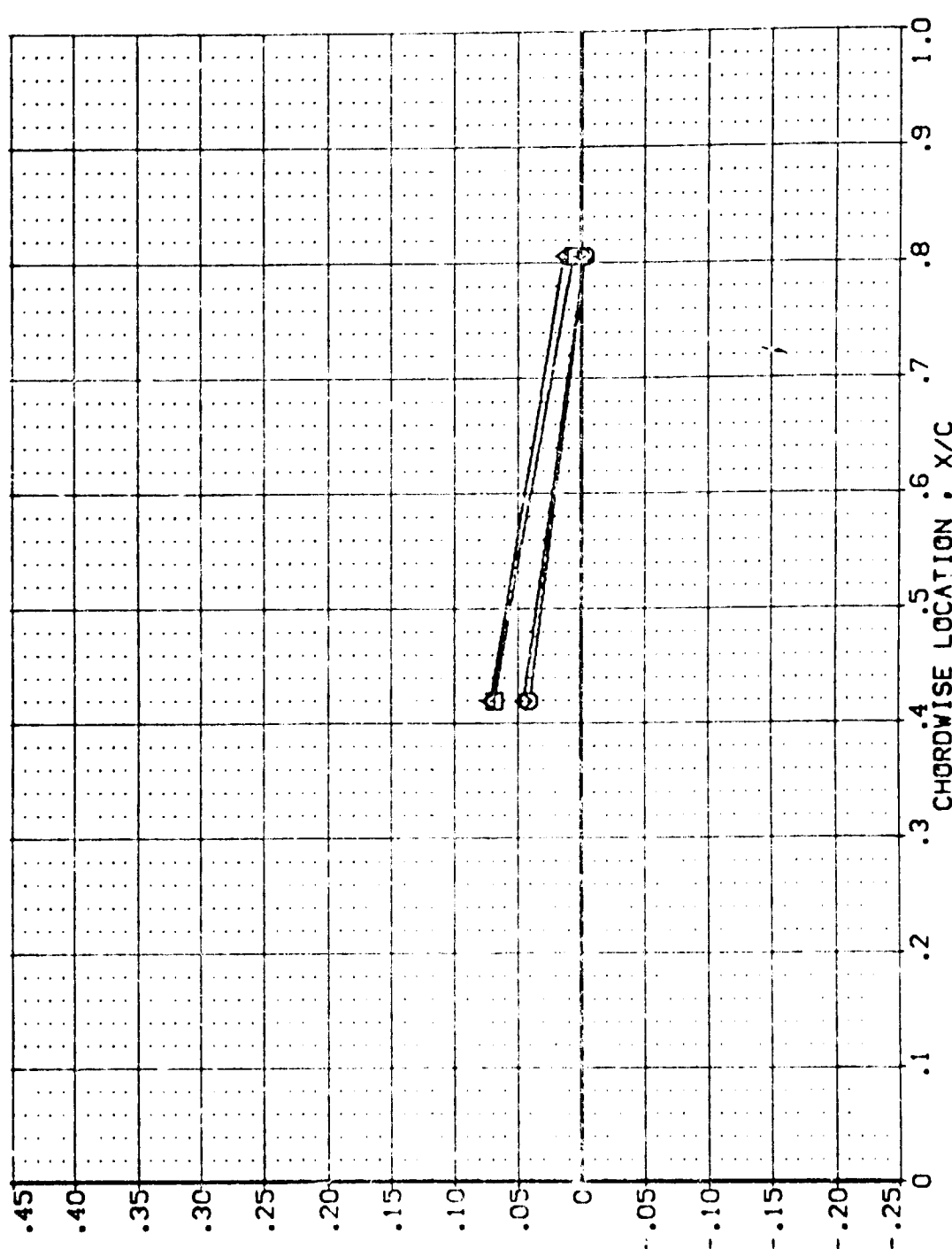
SPR

.826
.826
.826
.826

G/MAL

1.000
1.000
1.000
1.000

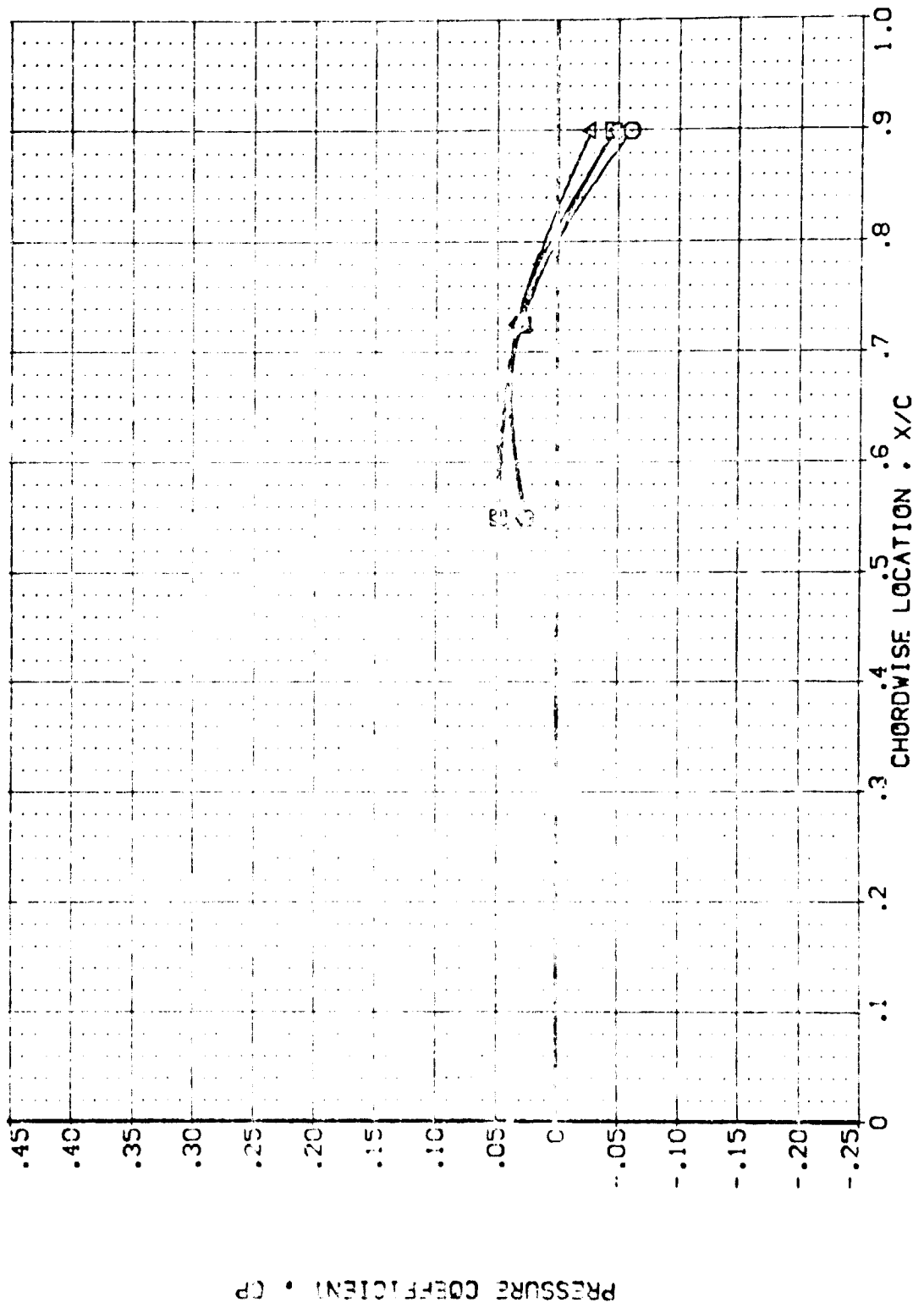
PRESSURE COEFFICIENT, CP



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .427

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SRPR	GIMBAL
(LBZD46)	AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LBZD50)	AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LBZD77)	AVES 87-710 1A12C 01 T1 S4 LOWER WING PRESSURE	.000			1.000
(LBZD76)	AVES 87-710 1A12C 01 T1 S4 LOWER WING PRESSURE	1.000	23.860	.826	1.000



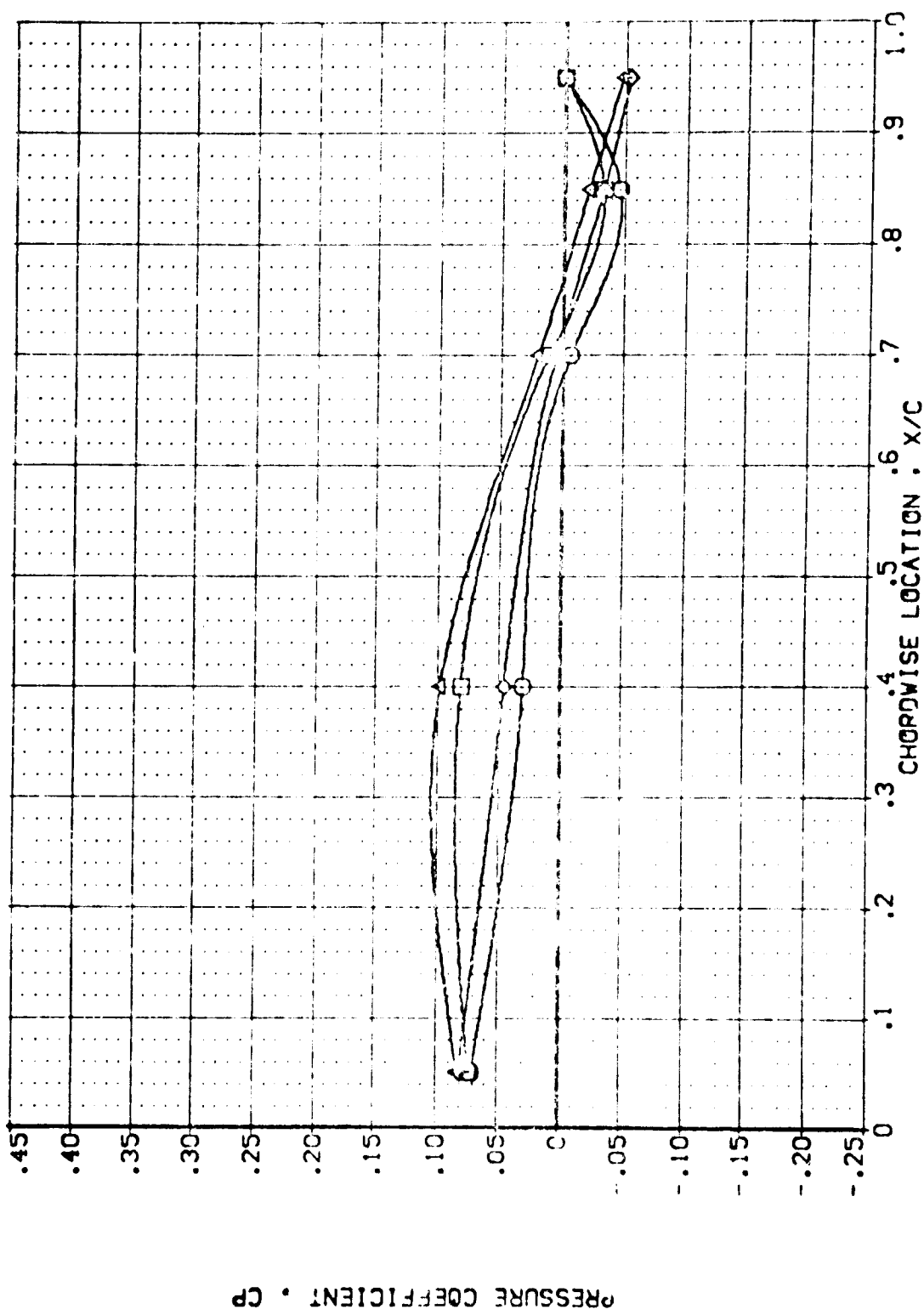
PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB0046)	AVES 87-710	[A]ZC 01 T1 S1	LOWER WING PRESSURE
(LB0050)	AVES 87-710	[A]ZC 01 T1 S1	UPPER WING PRESSURE
(LB0077)	AVES 87-710	[A]ZC 01 T1 S4	LOWER WING PRESSURE
(LB0078)	AVES 87-710	[A]ZC 01 T1 S4	UPPER WING PRESSURE

POWER U-2 S74-R 01K8AL

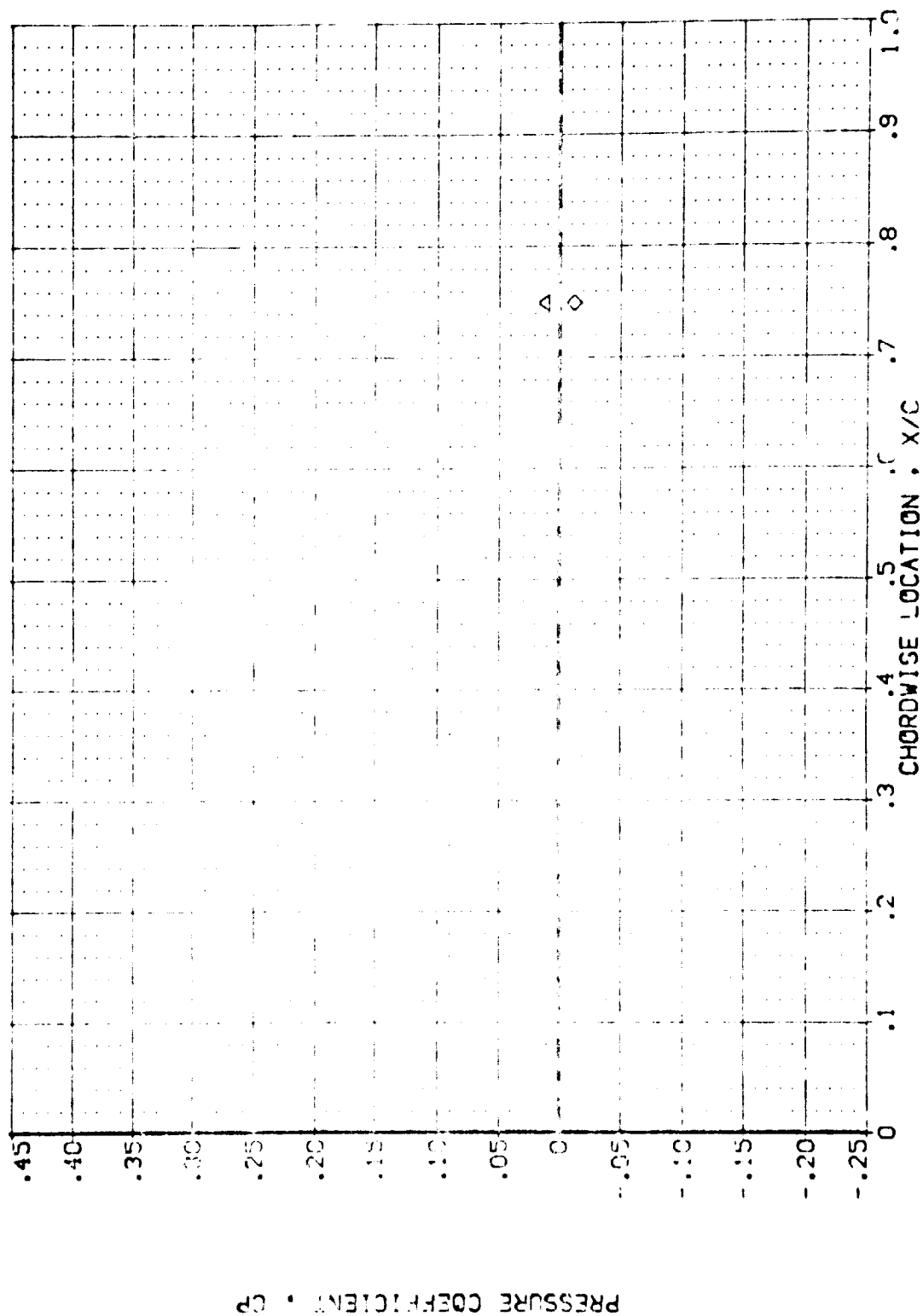
1.000	23.860	.626	1.000
1.000	23.860	.626	1.000
1.000	23.860	.626	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .673 PAGE 280

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SNRPR	GINBAL
(LE-046)	□	AMES 87-710 [A] [C] [0] [T] [S] LOWER WING PRESSURE	.000	23.860	.826	1.000
(LE-046)	□	AMES 87-710 [A] [C] [0] [T] [S] LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LE-046)	□	AMES 87-710 [A] [C] [0] [T] [S] LOWER WING PRESSURE	.000	23.860	.826	1.000
(LE-046)	□	AMES 87-710 [A] [C] [0] [T] [S] LOWER WING PRESSURE	1.000	23.860	.826	1.000

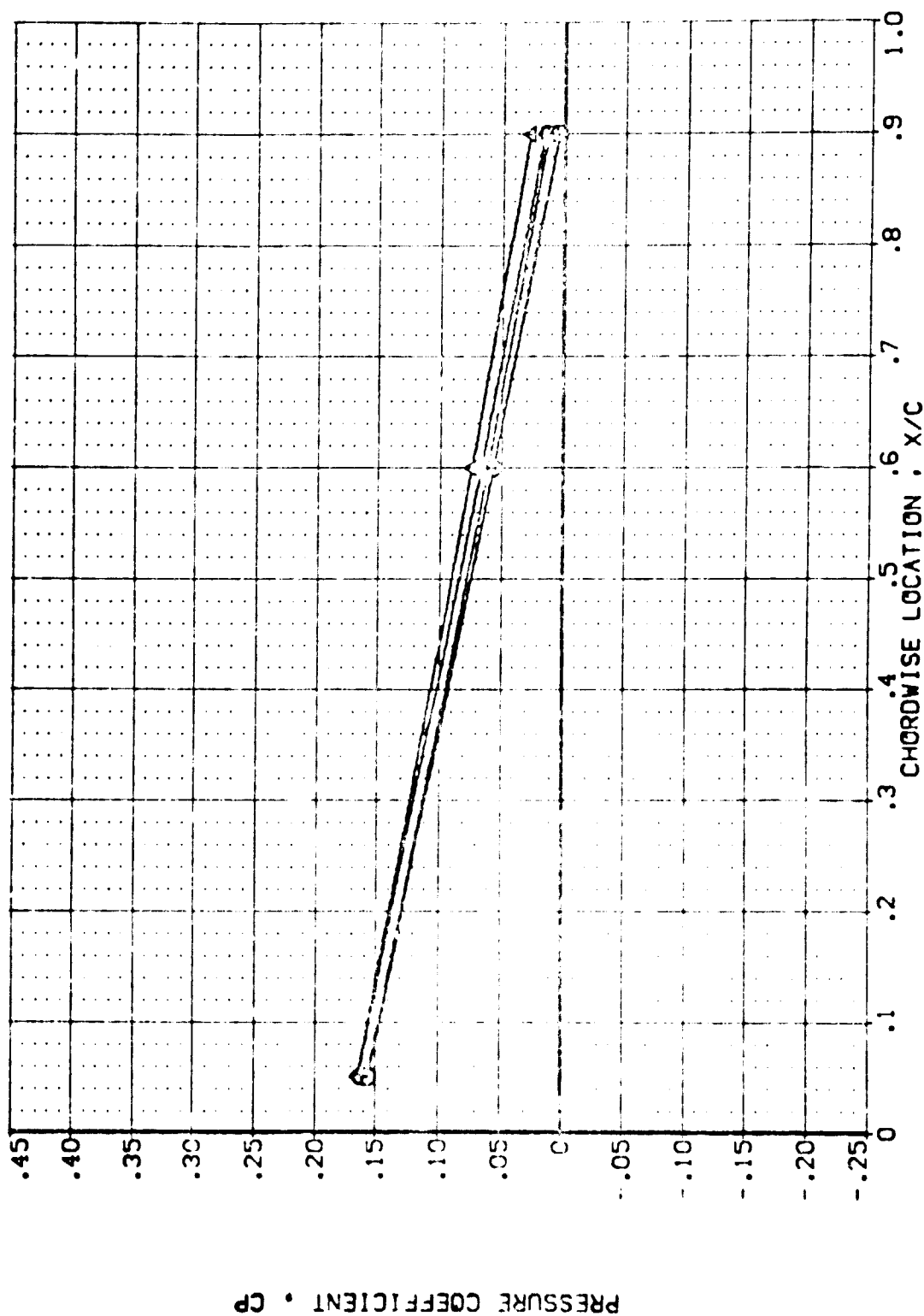


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZ046) [] AYES 87-710 [A] [ZC] [O] [T] [S] LOWER WING PRESSURE
 (LBZ050) [] AYES 87-710 [A] [ZC] [O] [T] [S] LOWER WING PRESSURE
 (LBZ077) [X] AYES 87-710 [A] [ZC] [O] [T] [S] LOWER WING PRESSURE
 (LBZ076) [X] AYES 87-710 [A] [ZC] [O] [T] [S] LOWER WING PRESSURE

POWER 0.000 23.650 1.000
 STWPR .826 .826
 GIMBAL 1.000 1.000 1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .887

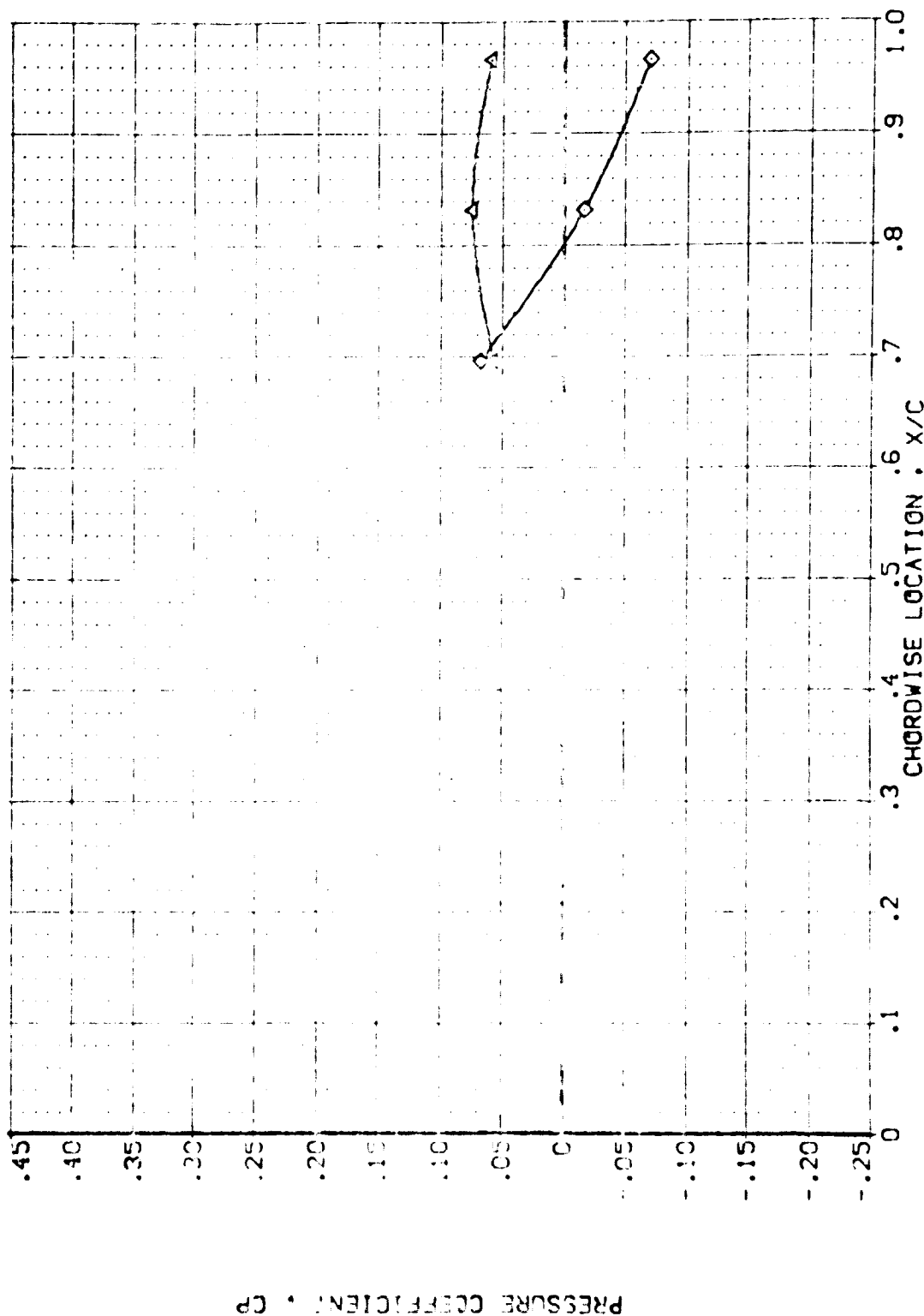
DATA SET SYMBOL

(LB704/6)
(LB705/6)
(LB707/7)
(LB707/6)

CONFIGURATION DESCRIPTION

AMES 87-710 [A] [2C] [0] [1] [1] [5] LOWER WING PRESSURE
AMES 87-710 [A] [2C] [0] [1] [1] [5] LOWER WING PRESSURE
AMES 87-710 [A] [2C] [0] [1] [1] [5] LOWER WING PRESSURE
AMES 87-710 [A] [2C] [0] [1] [1] [5] LOWER WING PRESSURE

POWER 0.000 23.860 23.860
GPRR 1.000 .805 .805
GMBAL 1.000 1.000 1.000

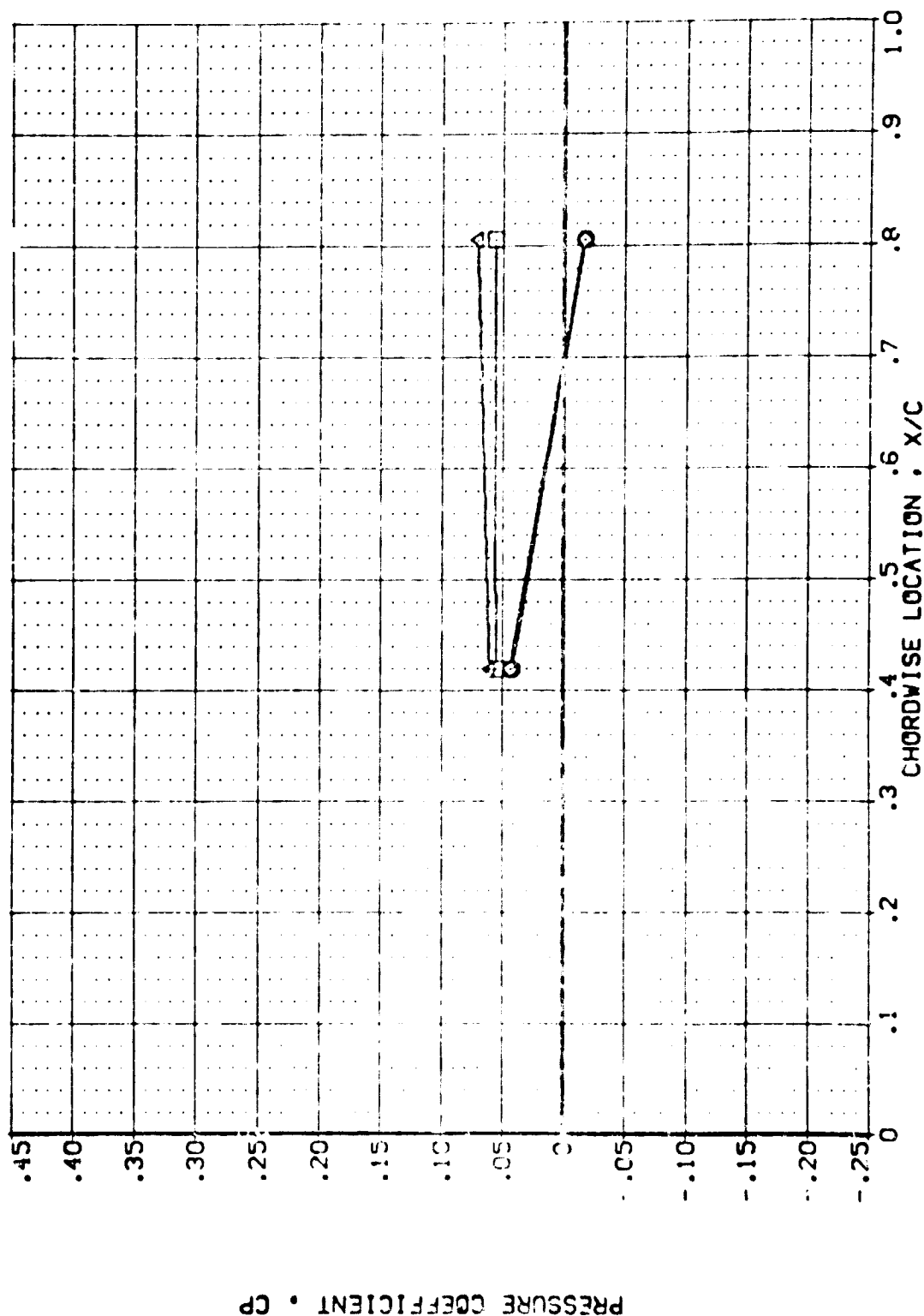


PRESSURE COEFFICIENT, CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	G/H	SC/PR	GIMBAL
(LB2046)	AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	.000			1.000
(LB2050)	AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LB2077)	AVES 87-710 [A12C 01 T1 S4] LOWER WING PRESSURE	.000			1.000
(LB2076)	AVES 87-710 [A12C 01 T1 S4] LOWER WING PRESSURE	1.000	23.860	.826	1.000

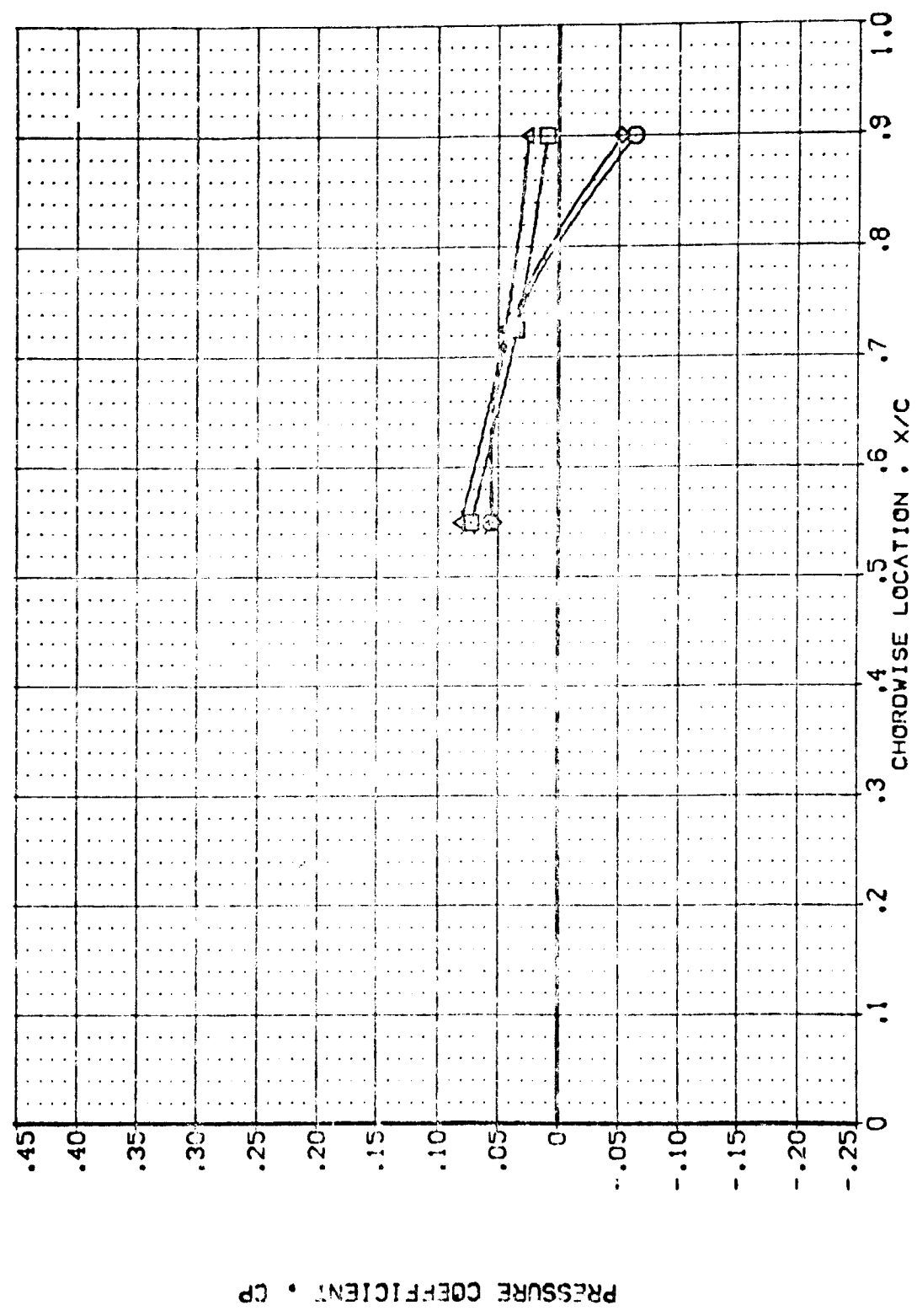


PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .427

PAGE 284

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	QPR	SWPR	GINBAL
(LB2046)	AMES 87-710 [A]2C 01 T1 S1 LOWER WING PRESSURE	1.000			1.000
(LB2050)	AMES 87-710 [A]2C 01 T1 S1 LOWER WING PRESSURE	1.000	23.660	.826	1.000
(LB2077)	AMES 87-710 [A]2C 01 T1 S4 LOWER WING PRESSURE	1.000			1.000
(LB2076)	AMES 87-710 [A]2C 01 T1 S4 LOWER WING PRESSURE	1.000	23.660	.826	1.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZD46) AHES 87-710 IAI2C 01 TI S1 LOWER WING PRESSURE

(LBZD50) AHES 87-710 IAI2C 01 TI S1 LOWER WING PRESSURE

(LBZD77) AHES 87-710 IAI2C 01 TI S4 LOWER WING PRESSURE

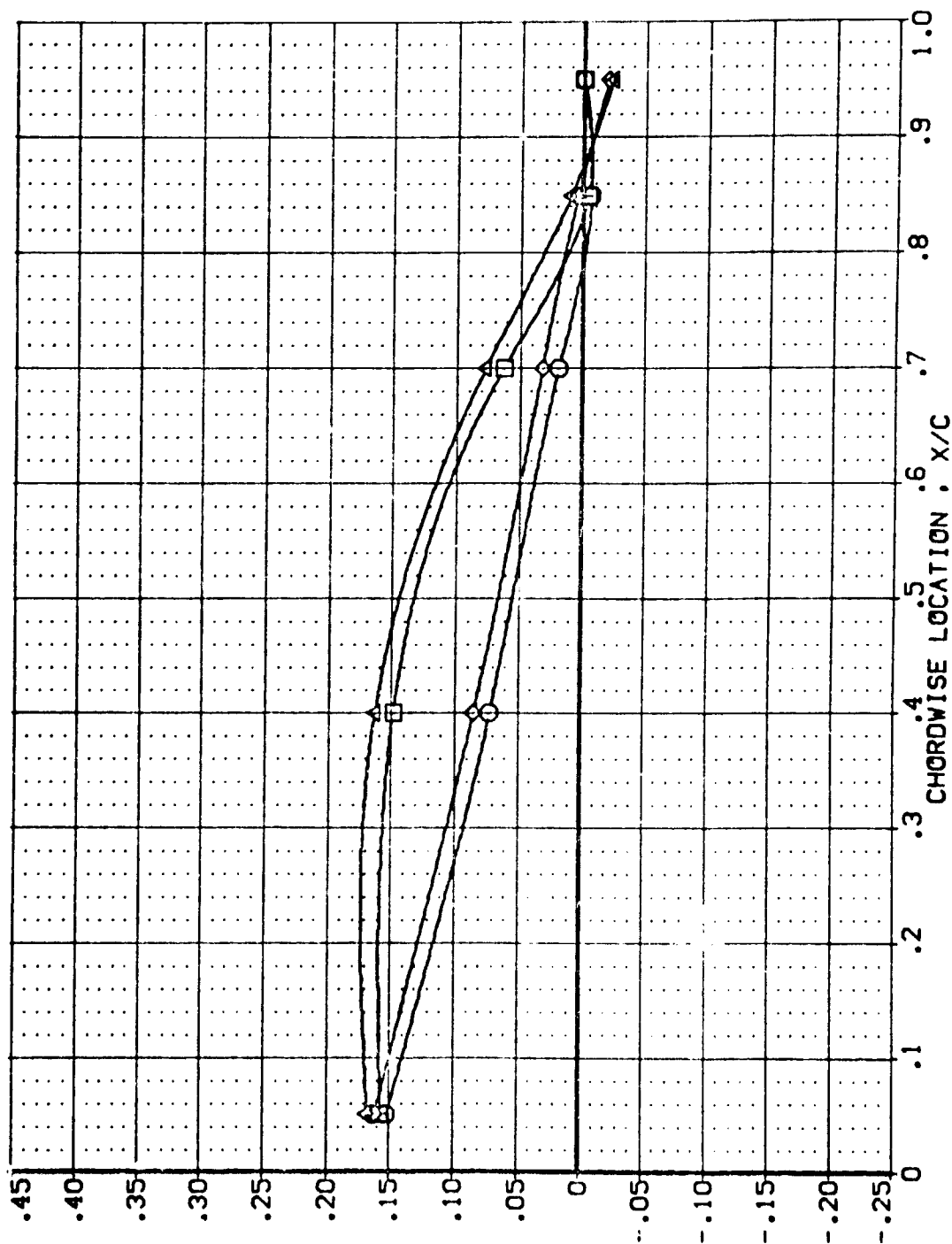
(LBZD76) AHES 87-710 IAI2C 01 TI S4 LOWER WING PRESSURE

POWER 0.000 1.000 1.000 1.000

CPR 23.860 23.860 23.860 23.860

SRPR .826 .826 .826 .826

Q1MBAL 1.000 1.000 1.000 1.000



PRESSURE COEFFICIENT, CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZD46)
(LBZD50)
(LBZD77)
(LBZD76)

AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

IA12C 01 TI S1
IA12C 01 TI S1
IA12C 01 TI S4
IA12C 01 TI S4

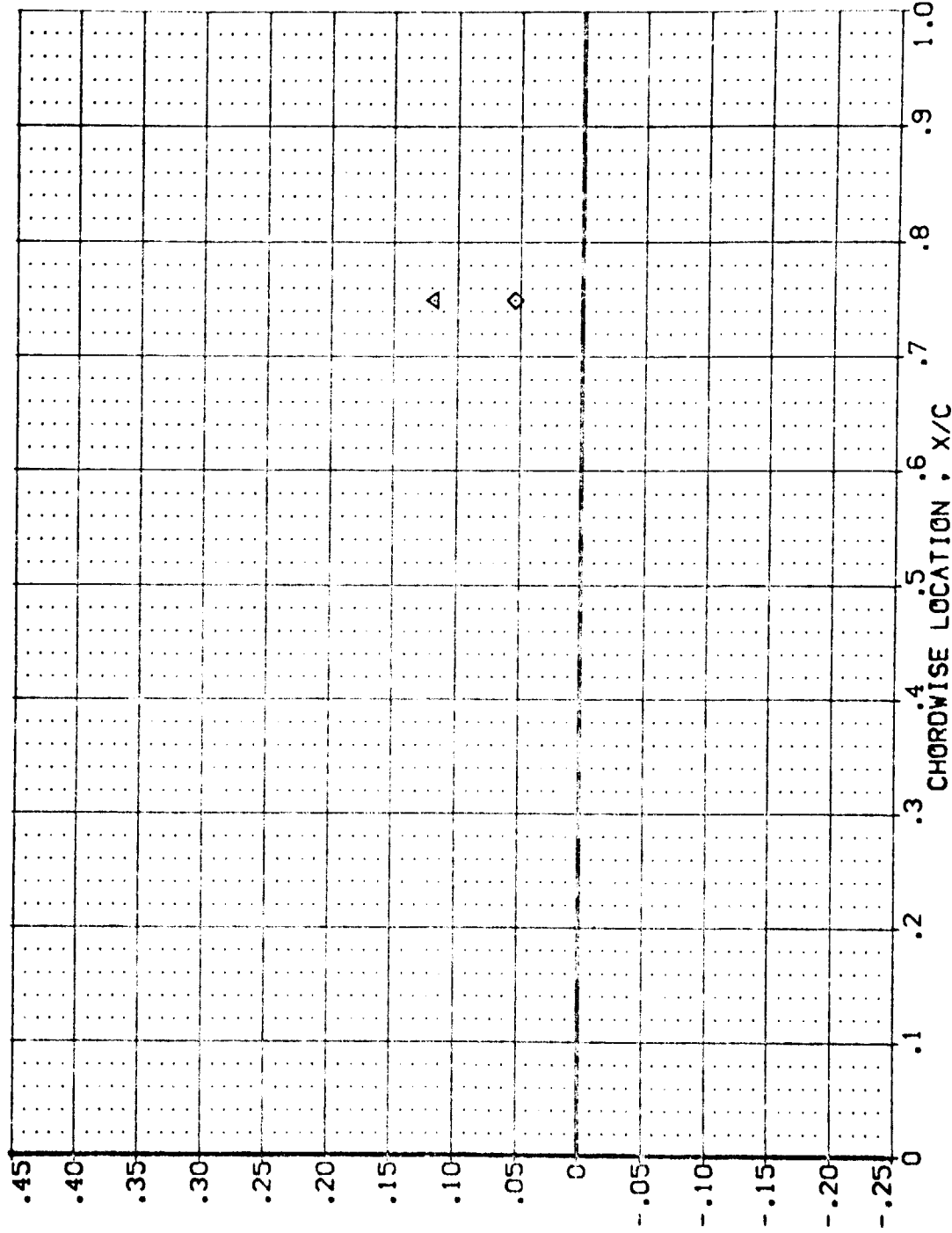
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER 0.000
1.000
1.000
1.000

SRPR 0.826
.826
.826
.826

OPR 23.860
23.860
23.860
23.860

GIMBAL 1.000
1.000
1.000
1.000



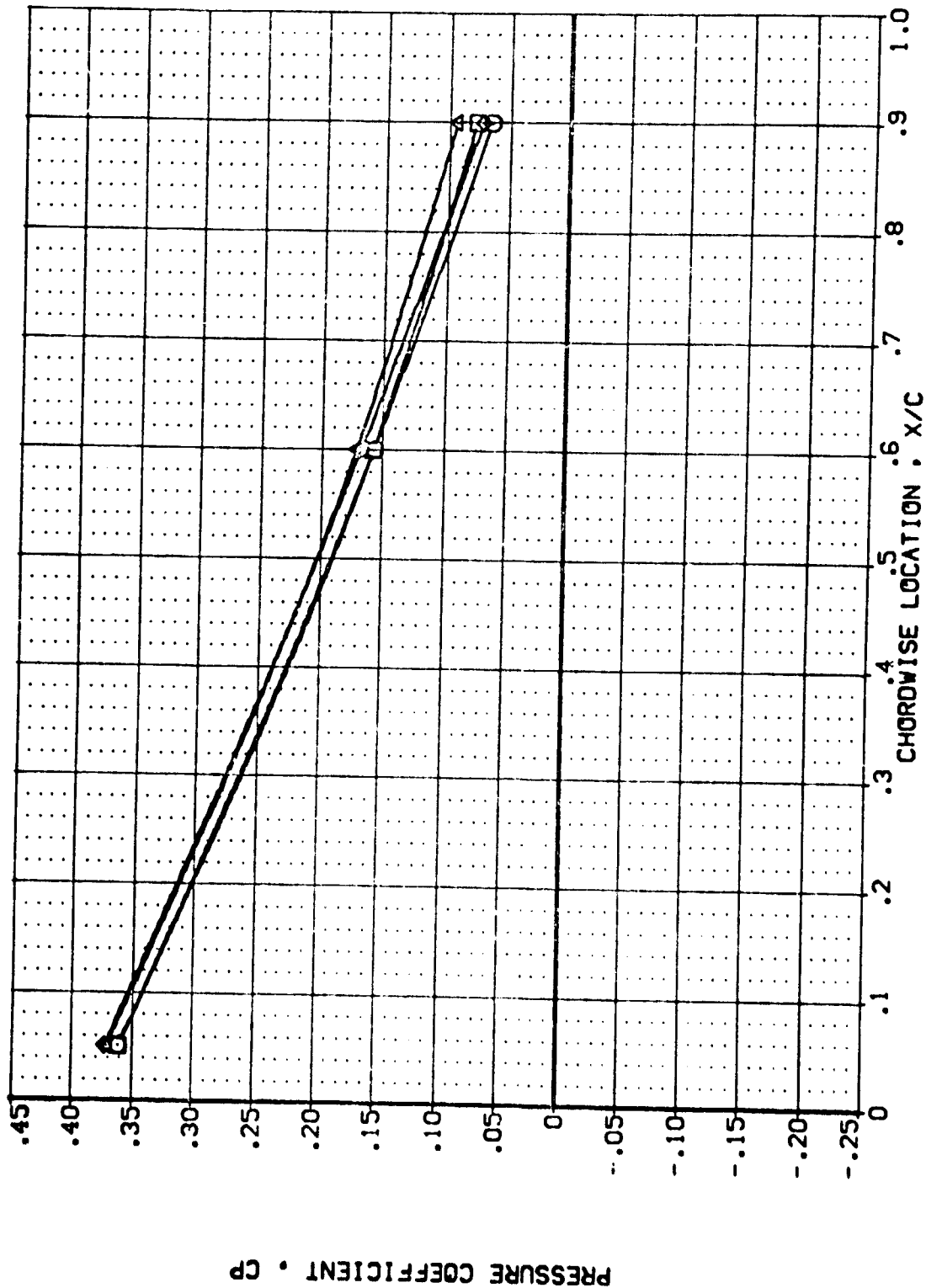
PRESSURE COEFFICIENT • CP

PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ046)	AVES 87-710	IA12C 01 TI S1	LOWER WING PRESSURE	POWER	OPR	SPRFR	GINBAL
(LBZ050)	AVES 87-710	IA12C 01 TI S1	LOWER WING PRESSURE	.000	23.860	.826	.000
(LBZ077)	AVES 87-710	IA12C 01 TI S4	LOWER WING PRESSURE	1.000	23.860	.826	.000
(LBZ076)	AVES 87-710	IA12C 01 TI S4	LOWER WING PRESSURE	1.000	23.860	.826	.000



PLUME AND SRB SHROUD EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB7037)
(UB7038)
(UB7039)
(UB7040)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

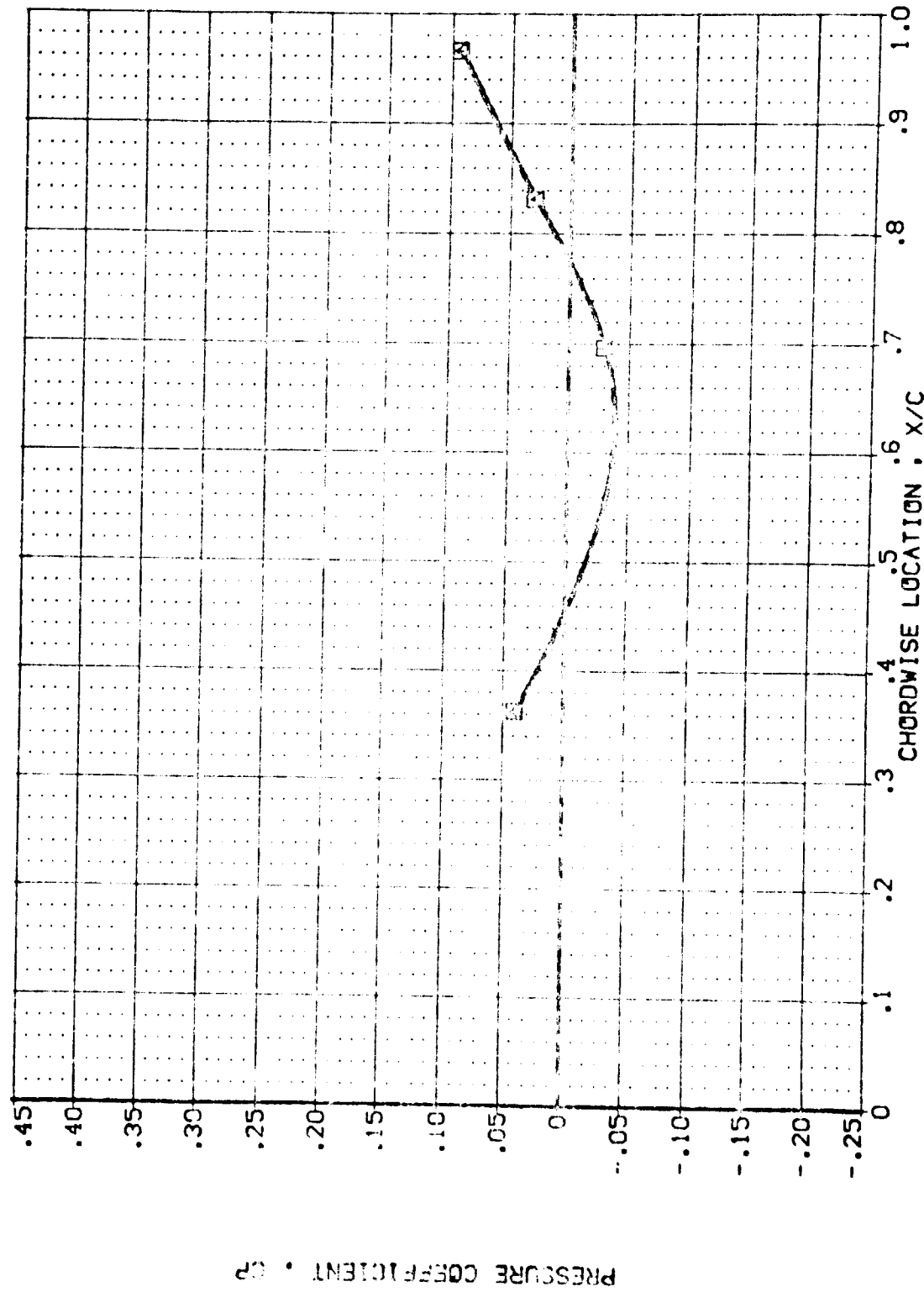
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER 0.000
0.000
0.000
0.000

OPR 31.260
31.260
31.260
31.260

SWPR 0.916
0.916
0.916
0.916

GIMBAL 1.000
4.000
1.000
3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP
MACH = 2.500 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL

(UBZ037)
(UBZ039)
(UBZ034)
(UBZ036)

CONFIGURATION DESCRIPTION

AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE
AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE
AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE

POWER

0.000
1.000
1.000
31.260
31.260
31.260

CFR

31.260
31.260
31.260

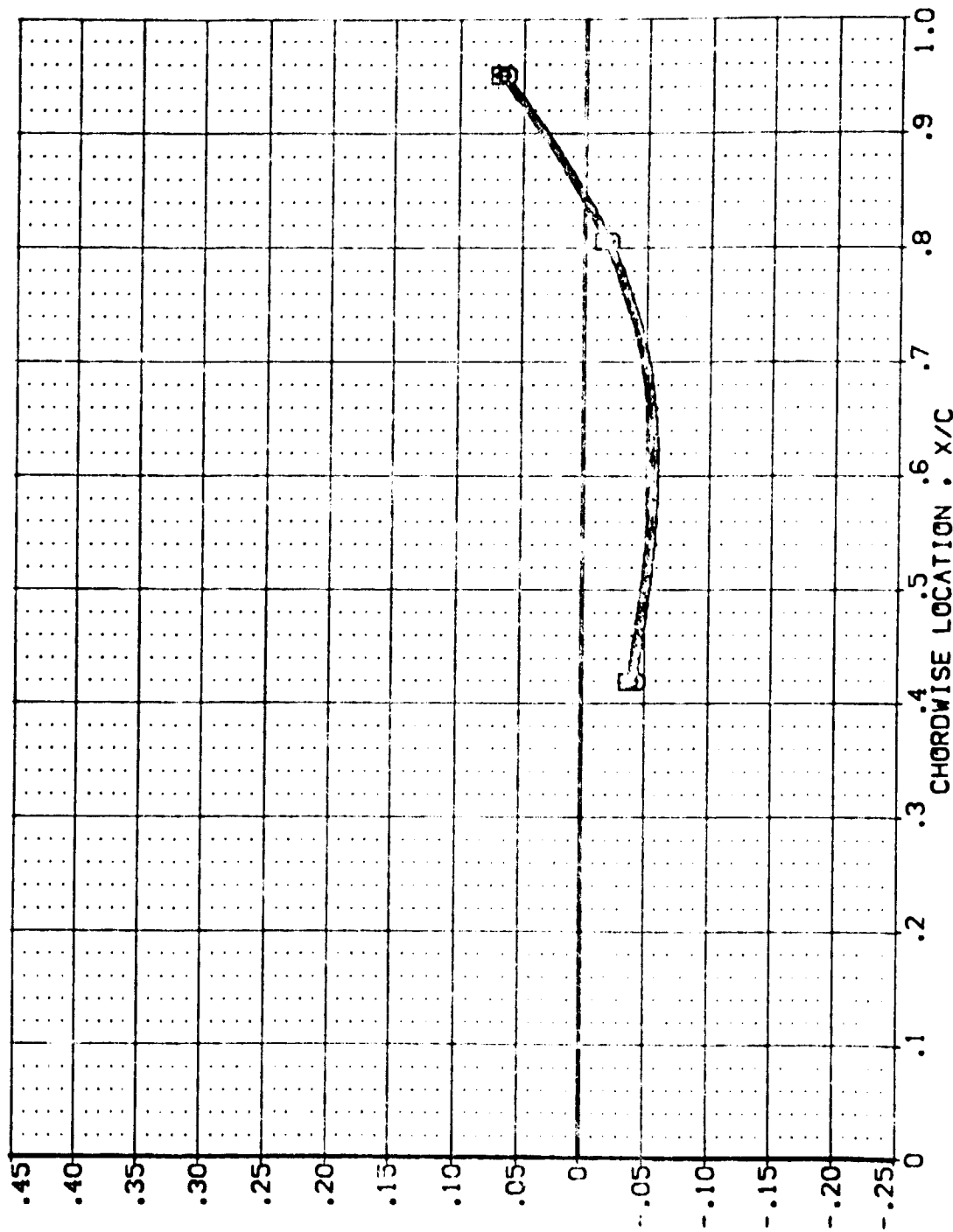
SCPR

0.916
0.916
0.916

GIMBAL

1.000
4.000
3.000

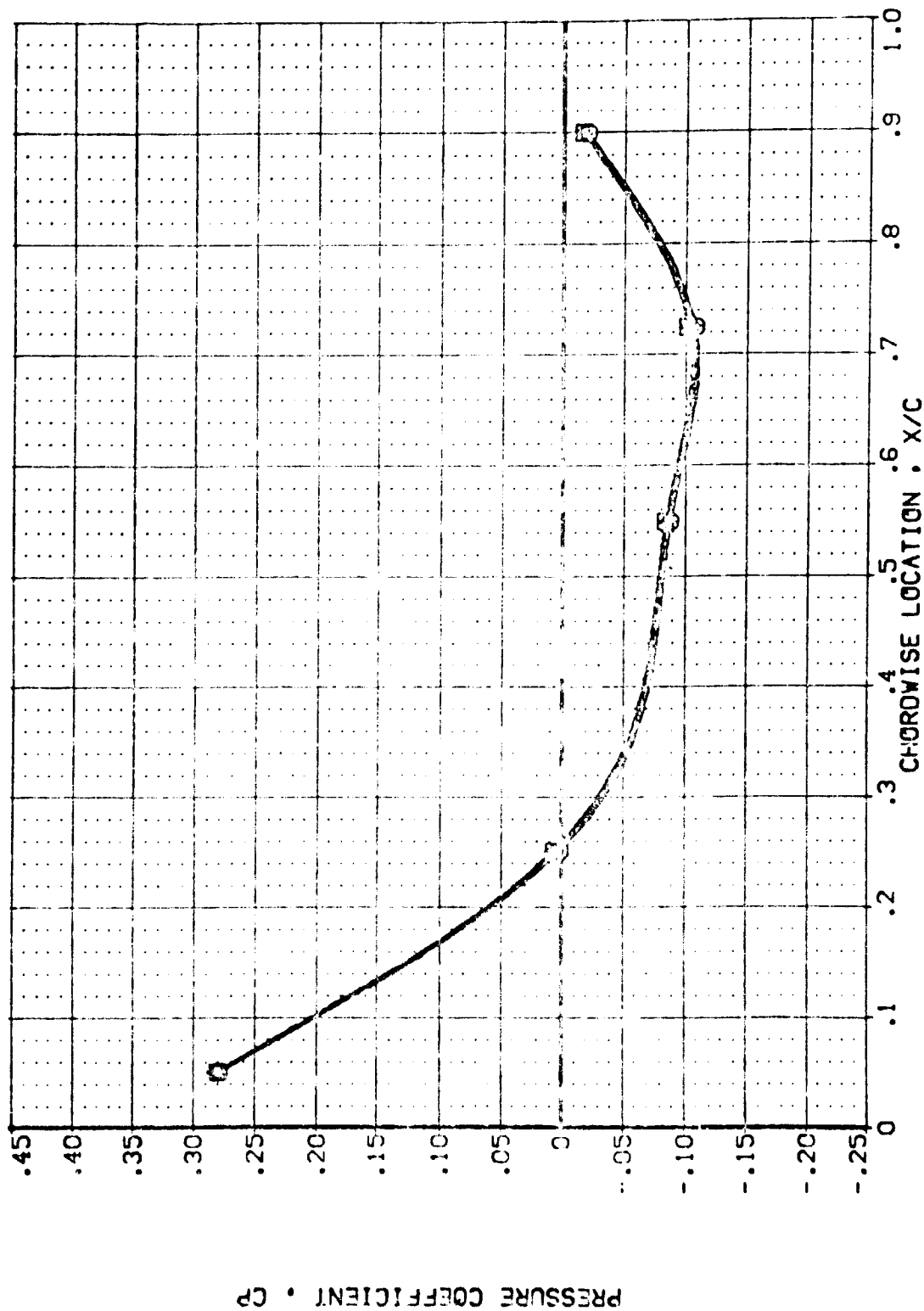
PRESSURE COEFFICIENT • CP



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SPRFR	GIMBAL
(LBZ007)	AVES 87-710 [A]2C 01 T1 S1 UPPER WING PRESSURE	.000	31.260	.916	1.000
(LBZ009)	AVES 87-710 [A]2C 01 T1 S1 UPPER WING PRESSURE	1.000	31.260	.916	4.000
(LBZ004)	AVES 87-710 [A]2C 01 T1 S1 UPPER WING PRESSURE	1.000	31.260	.916	1.000
(LBZ056)	AVES 87-710 [A]2C 01 T1 S1 UPPER WING PRESSURE	1.000	31.260	.916	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .534

PAGE 291

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[UB2007]
[UB2008]
[UB2009]
[UB2010]

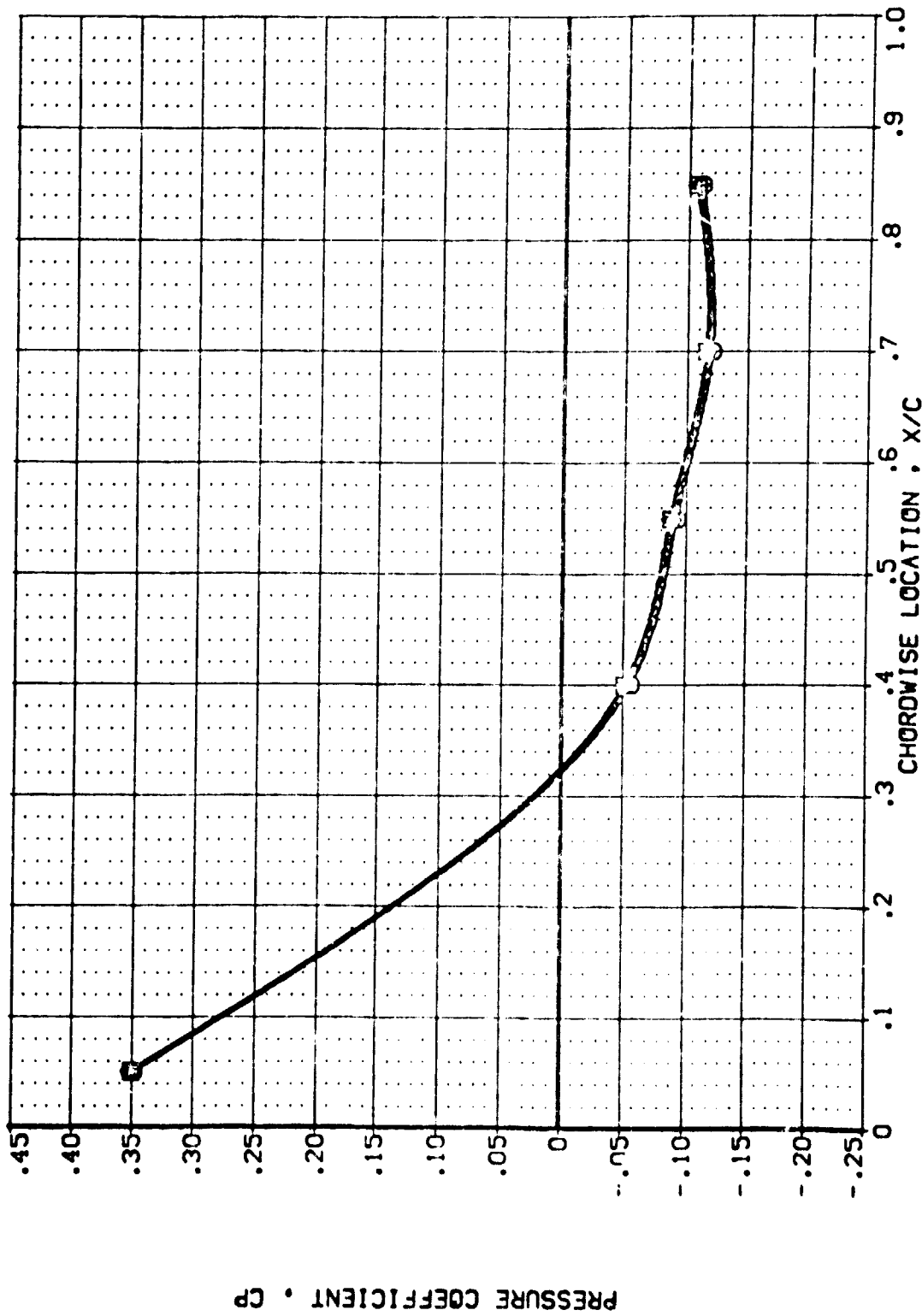
AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE
AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE
AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE
AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE

POWER 0.000
1.000
1.000
1.000

QFR 31.260
31.260
31.260
31.260

SRPR .916
.916
.916
.916

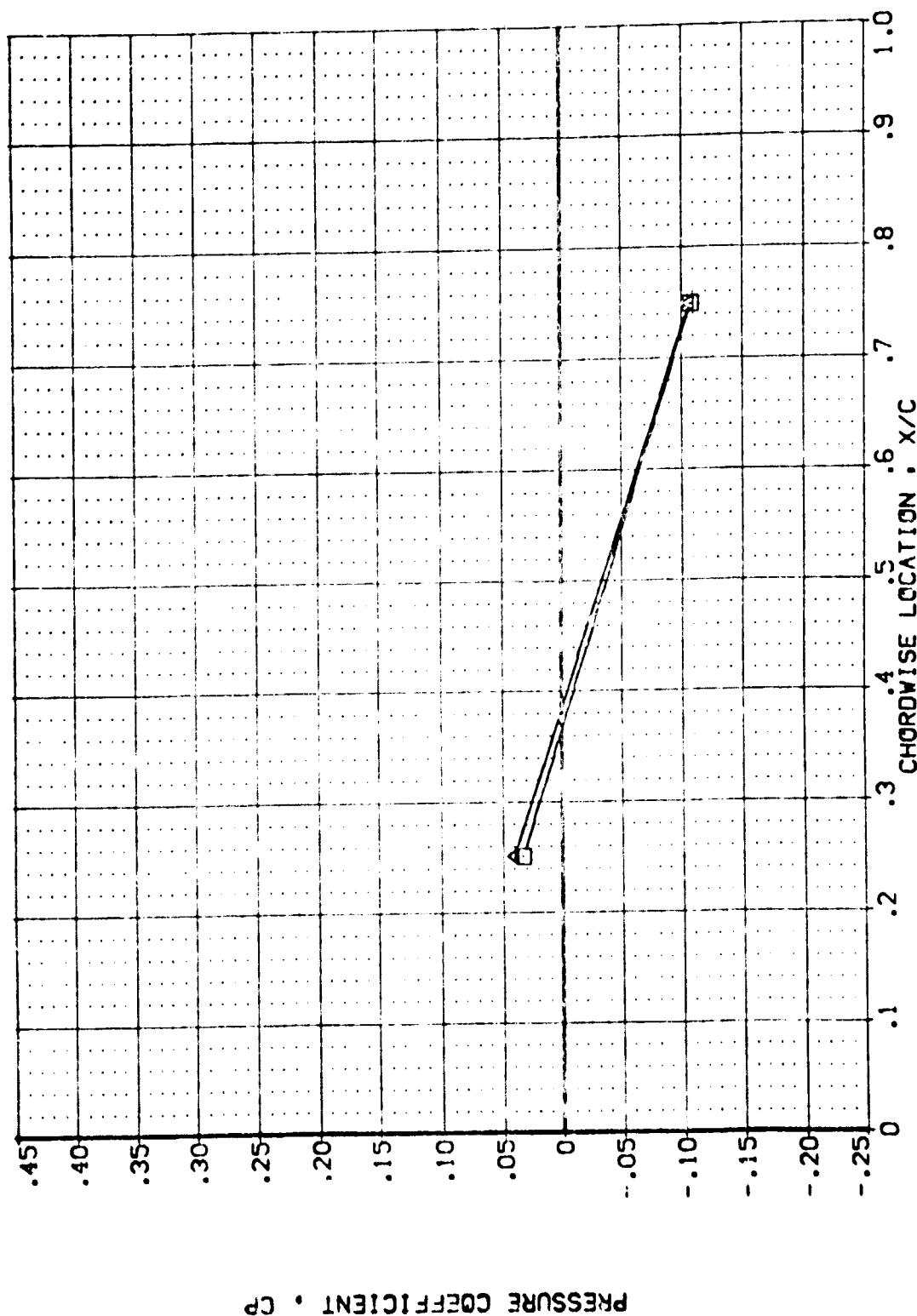
GIMBAL 1.000
4.000
1.000
3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CPR	SWPR	GIMBAL
(UBZ037)	AVES 87-710 [A]ZC 01 T1 S1 UPPER WING PRESSURE	.000	31.260	.916	1.000
(UBZ038)	AVES 87-710 [A]ZC 01 T1 S1 UPPER WING PRESSURE	1.000	31.260	.916	4.000
(UBZ039)	AVES 87-710 [A]ZC 01 T1 S1 UPPER WING PRESSURE	1.000	31.260	.916	1.000
(UBZ056)	AVES 87-710 [A]ZC 01 T1 S1 UPPER WING PRESSURE	1.000	31.260	.916	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -0.000 Y/B = .780

PAGE 233

DATA SET SYMBOL

(UB1037)
(UB2039)
(UB2034)
(UB2036)

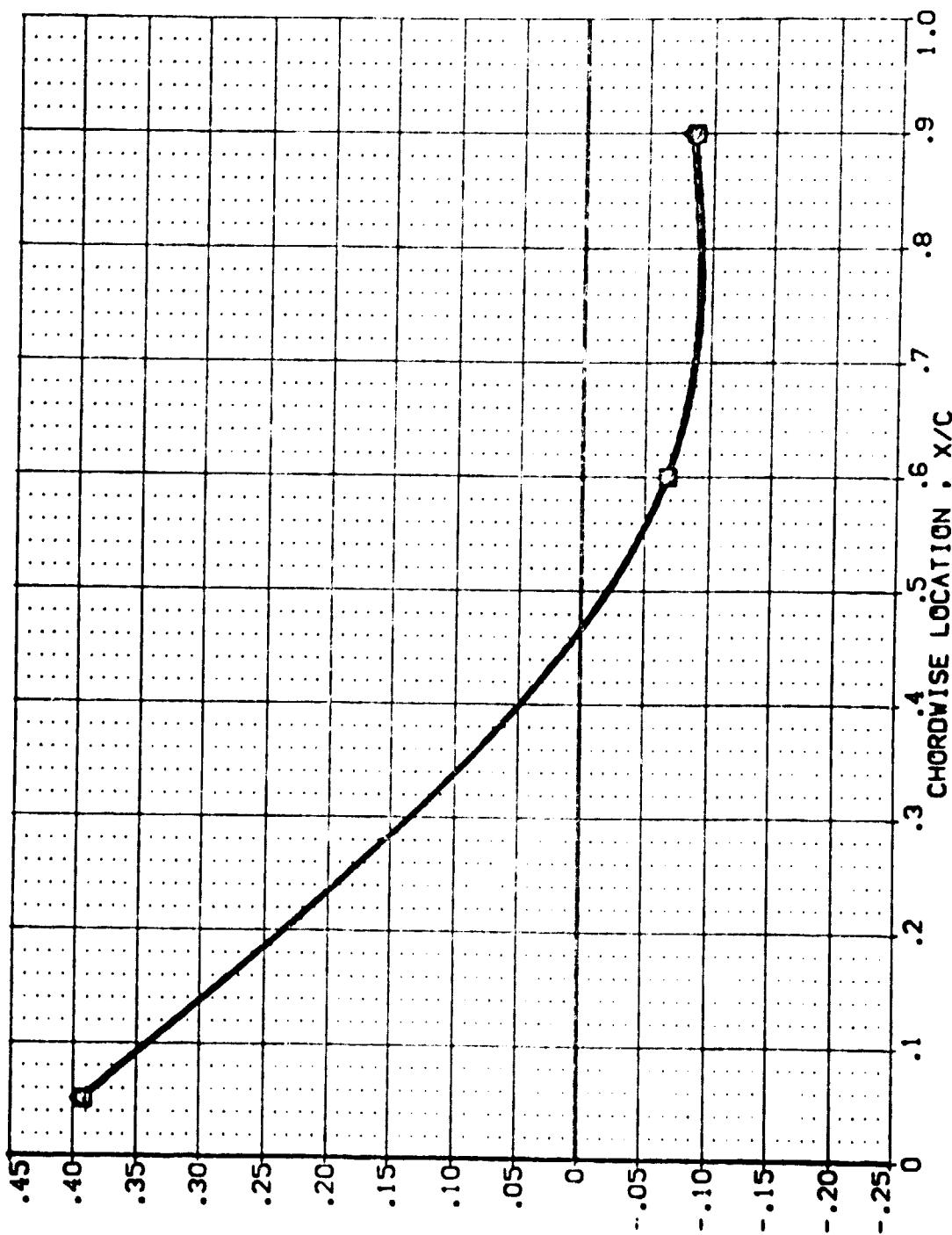
CONFIGURATION DESCRIPTION
AVES 07-710 IAI2C 01 TI SI
AVES 07-710 IAI2C 01 TI SI
AVES 07-710 IAI2C 01 TI SI
AVES 07-710 IAI2C 01 TI SI

POWER
.000
1.000
1.000
1.000

GPR
31.260
31.260
31.260

GIMBAL
1.000
4.000
1.000
3.000

PRESSURE COEFFICIENT, CP



CHORDWISE LOCATION, X/C

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .887

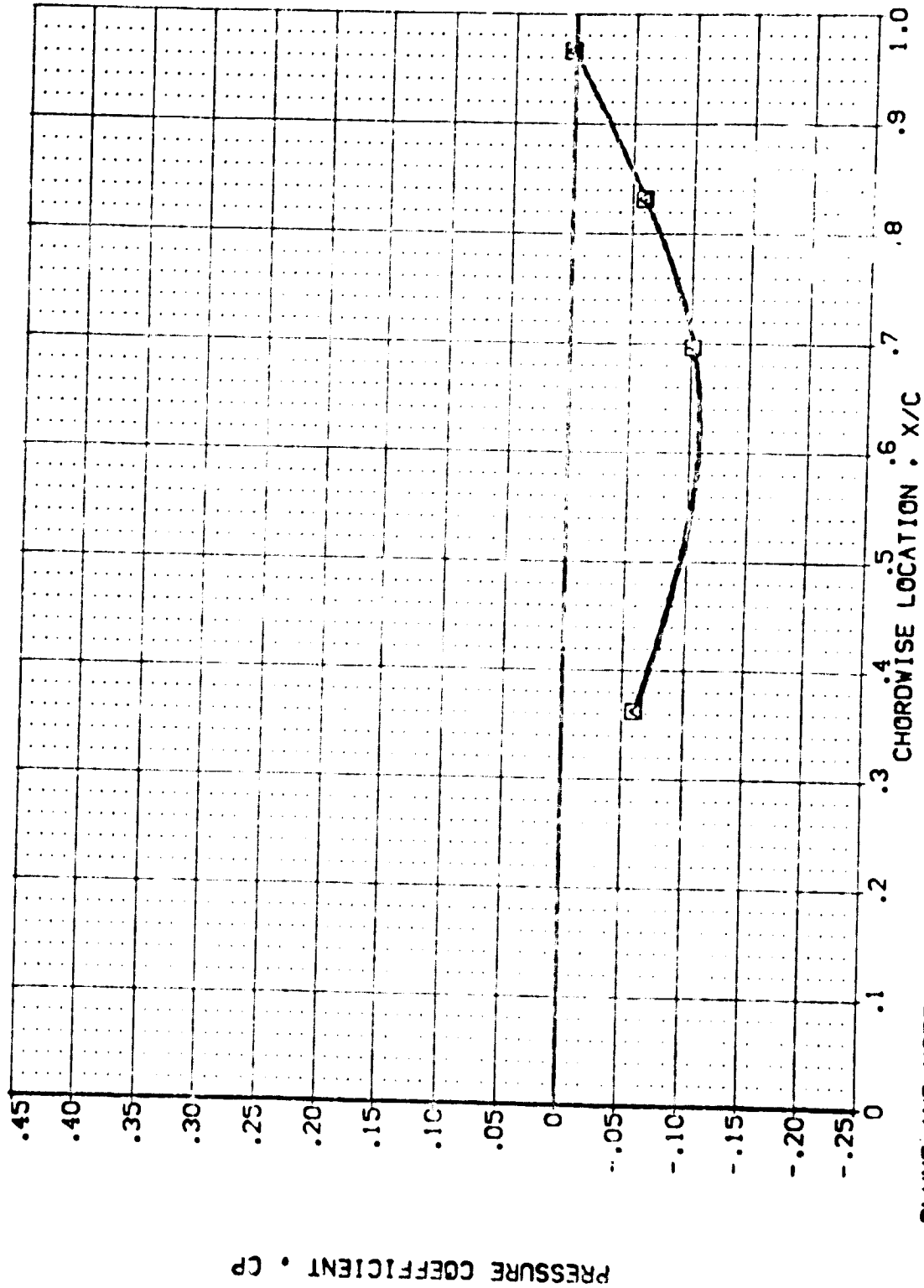
DATA SET SYMBOL

(UBZ037)
(UBZ038)
(UBZ039)
(UBZ040)
(UBZ041)

CONFIGURATION DESCRIPTION

AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER C/P S/P/R GIMBAL
.000 31.260 1.000
1.000 31.260 .916
1.000 31.260 .916
1.000 3.000



PRESSURE COEFFICIENT • CP

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP
MACH = 2.500 ALPHA = .000 Y/B = .299

DATA SET SYMBOL

(UB2037)
(UB2038)
(UB2039)
(UB2040)
(UB2041)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

CONFIGURATION DESCRIPTION

IA12C 01 TI SI
IA12C 01 TI SI
IA12C 01 TI SI
IA12C 01 TI SI

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

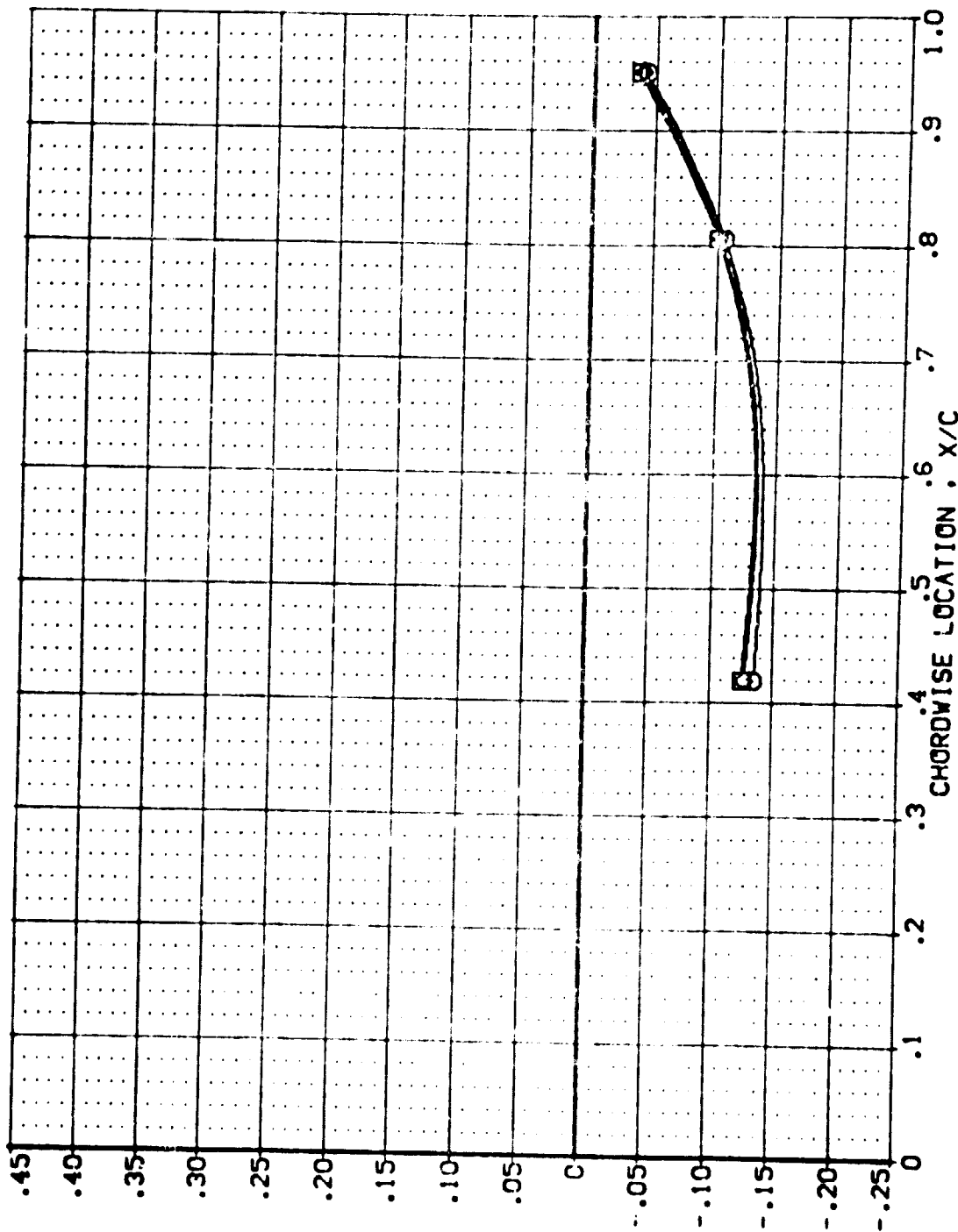
POWER 0.000
0.000
1.000
1.000
1.000

QPR 31.260
31.260
31.260
31.260
31.260

SC-PR .916
.916
.916
.916
.916

GIMBAL 1.000
4.000
1.000
1.000
3.000

PRESSURE COEFFICIENT • CP

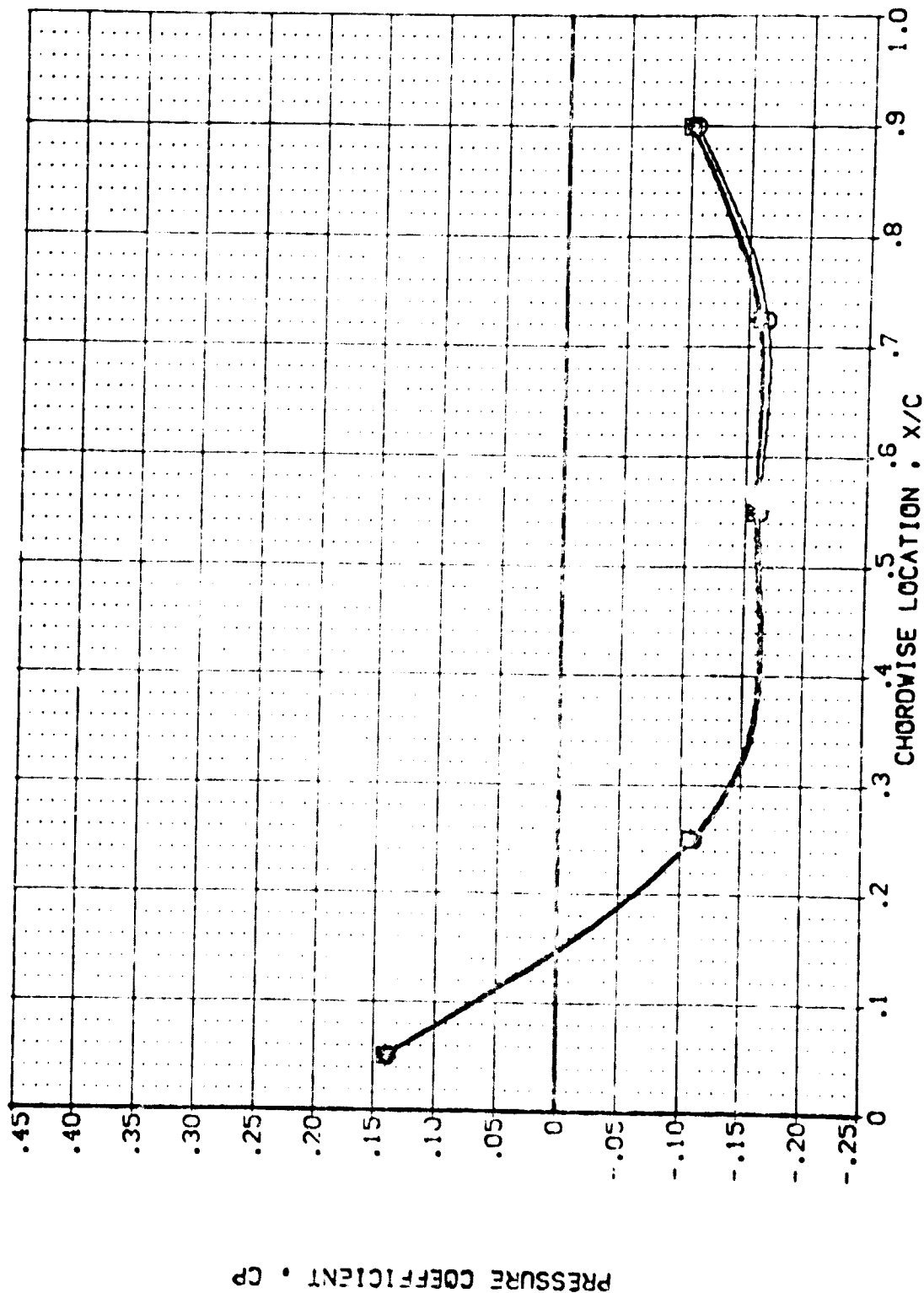


PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2007)	AVES 87-710	IA12C 01	TI SI	UPPER WING PRESSURE	POWER	OPR	SWPR	Q1MBAL
(UB2008)	AVES 87-710	IA12C 01	TI SI	UPPER WING PRESSURE	.000	31.260	.916	1.000
(UB2009)	AVES 87-710	IA12C 01	TI SI	UPPER WING PRESSURE	1.000	31.260	.916	4.000
(UB2010)	AVES 87-710	IA12C 01	TI SI	UPPER WING PRESSURE	1.000	31.260	.916	1.000
(UB2011)	AVES 87-710	IA12C 01	TI SI	UPPER WING PRESSURE	1.000	31.260	.916	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL
(UB2037)
(UB2038)
(UB2039)
(UB2034)
(UB2036)

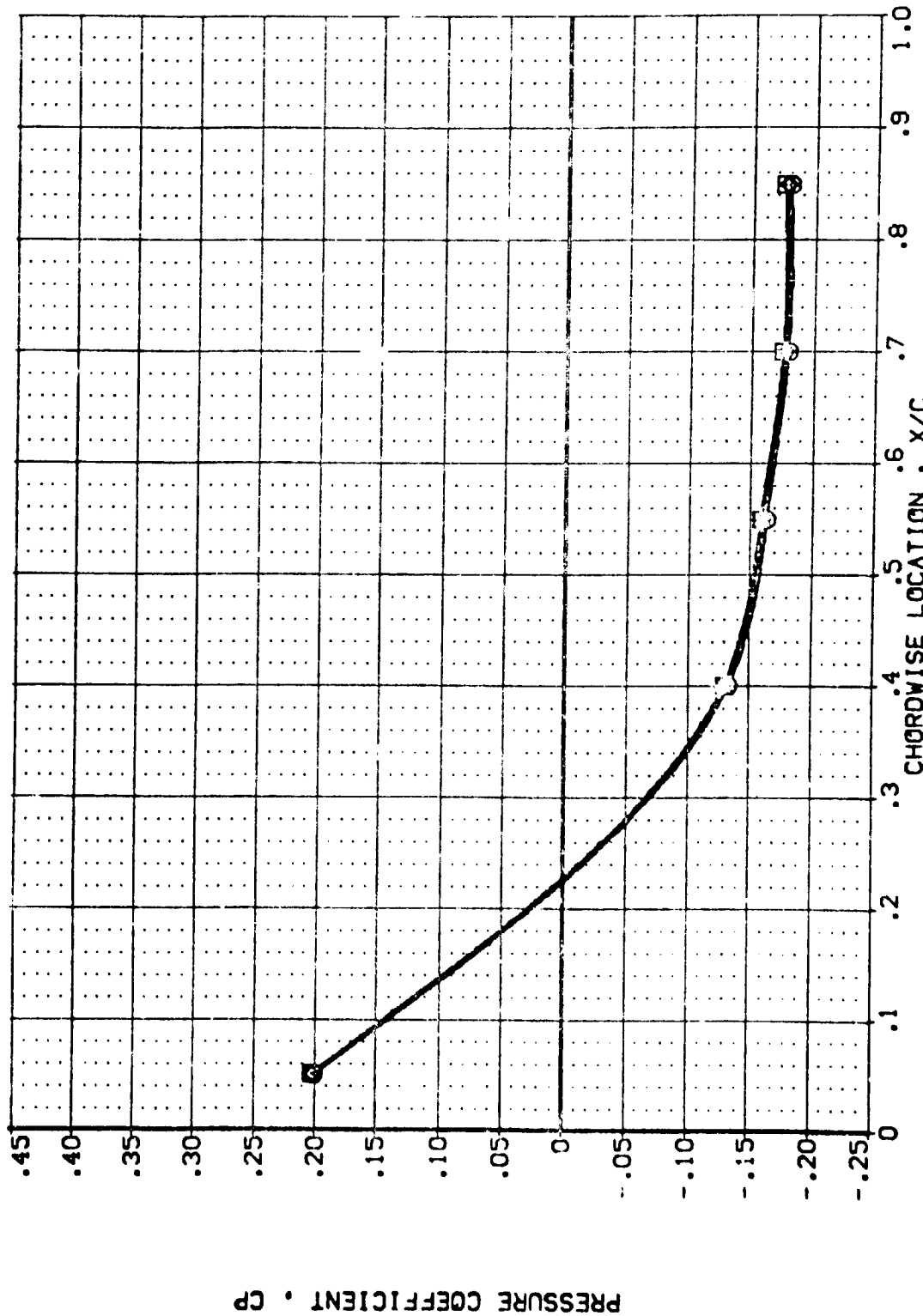
CONFIGURATION DESCRIPTION
AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER
.000
1.000
1.000
1.000

Q/R
31.260
31.260
31.260
31.260

GIMBAL
1.000
4.000
1.000
3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

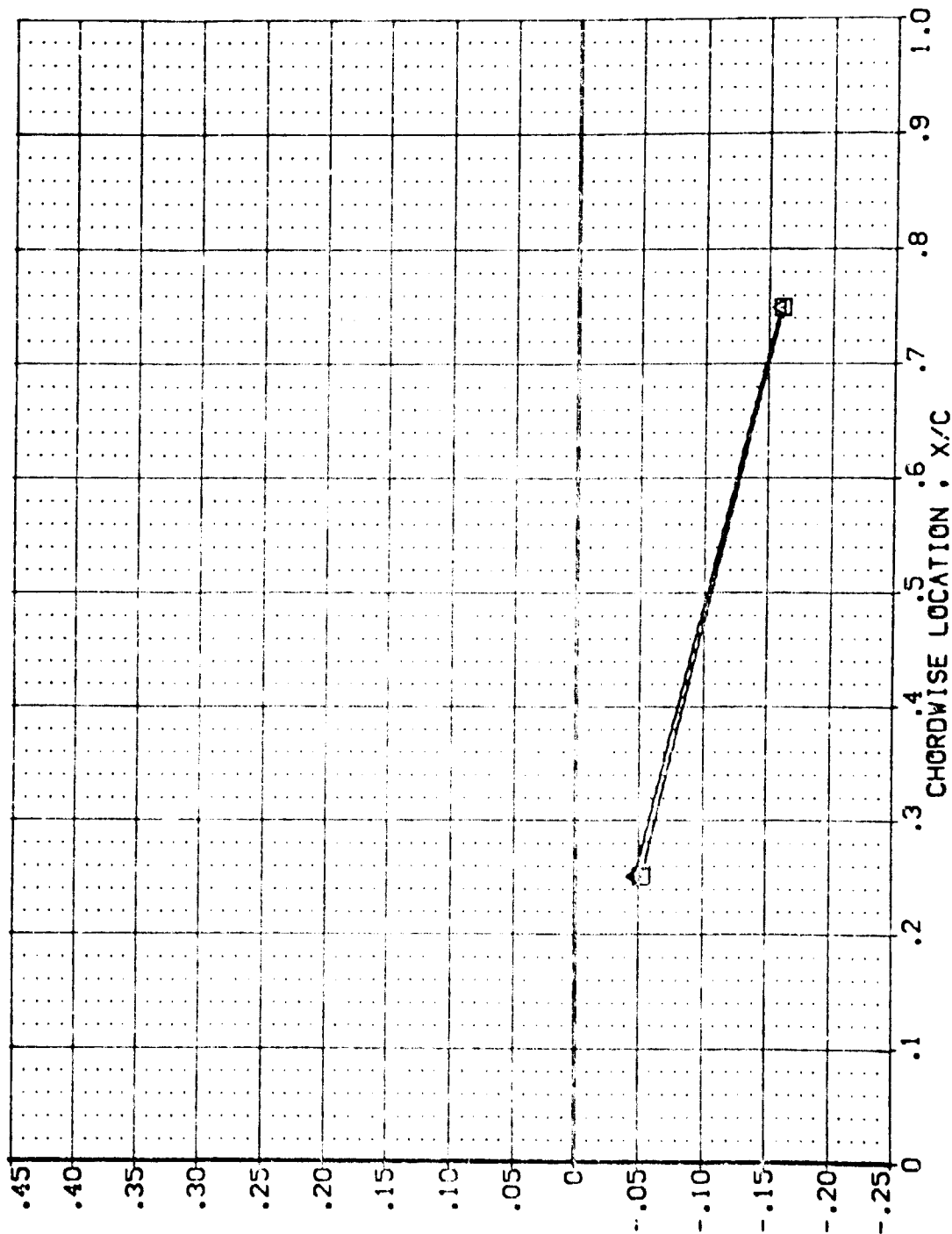
(LBZ037)
(LBZ038)
(LBZ039)
(LBZ040)
(LBZ041)

AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

1A12C 01 T1 S1
1A12C 01 T1 S1
1A12C 01 T1 S1
1A12C 01 T1 S1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER C/P SRPR GIMBAL
.000 31.260 1.000
1.000 31.260 .916
1.000 31.260 .916
1.000 31.260 3.000



PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .780

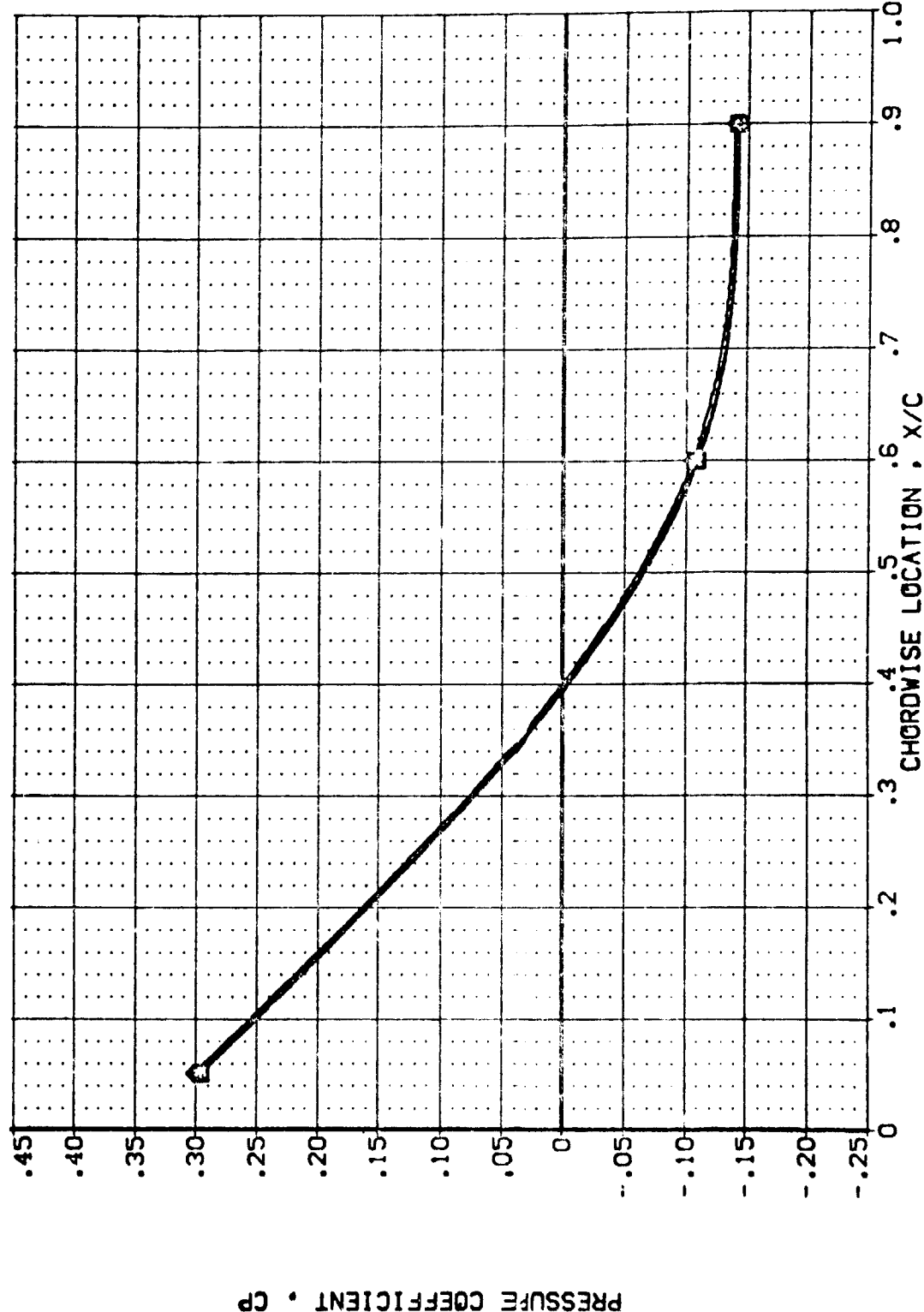
DATA SET SYMBOL

(LBZ037)
(LBZ038)
(LBZ039)
(LBZ040)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

POWER 0.000
POWER 1.000
POWER 1.000
POWER 1.000

GIMBAL 1.000
GIMBAL 1.000
GIMBAL 1.000
GIMBAL 1.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP
MACH = 2.500 ALPHA = .000 Y/B = .887
PAGE 300

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ007) AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

(UBZ008) AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

(UBZ009) AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

(UBZ010) AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

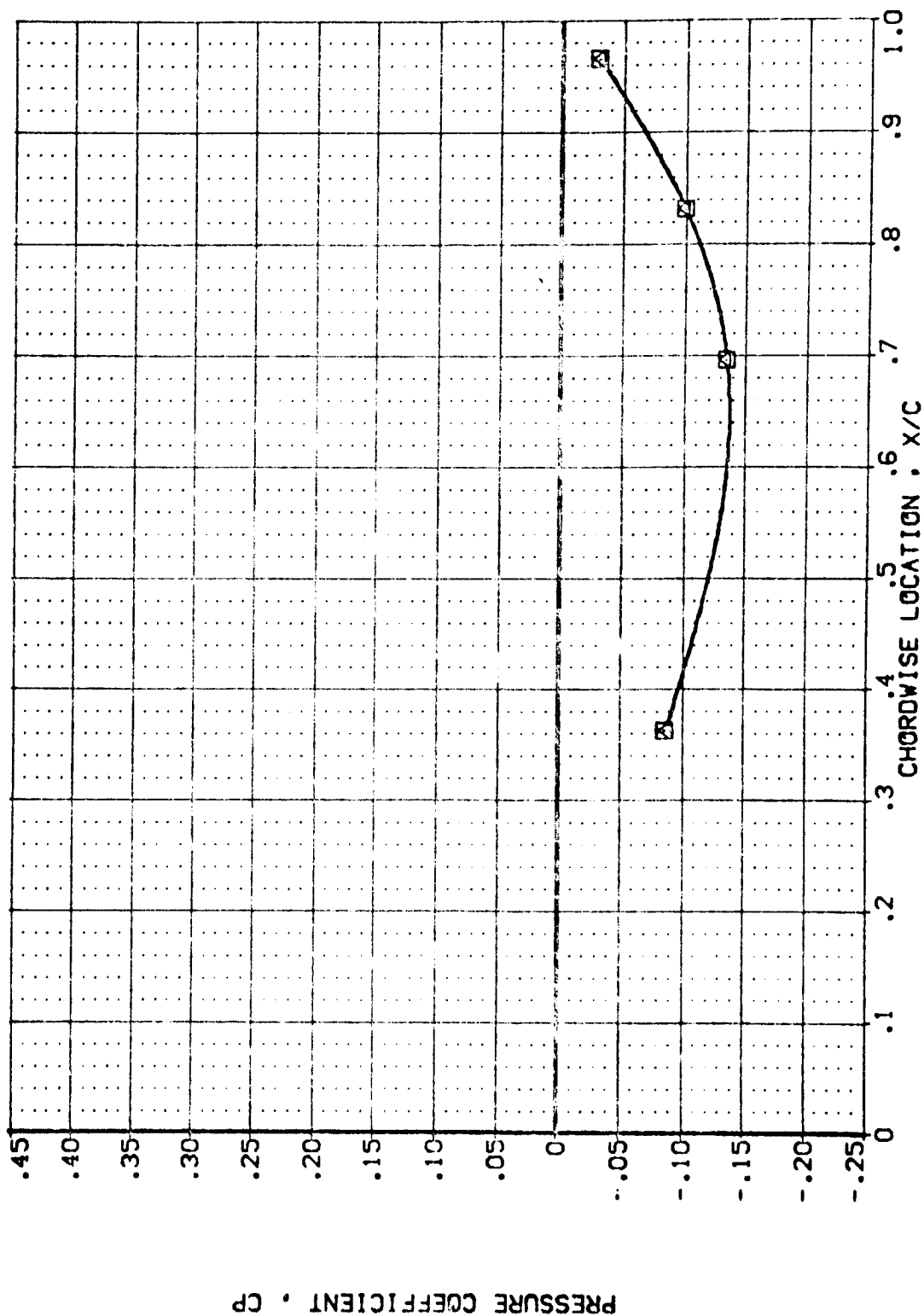
POWER GPR SHPR GIMBAL

.000 31.260 .916 1.000

1.000 31.260 .916 4.000

1.000 31.260 .916 1.000

1.000 31.260 .916 3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

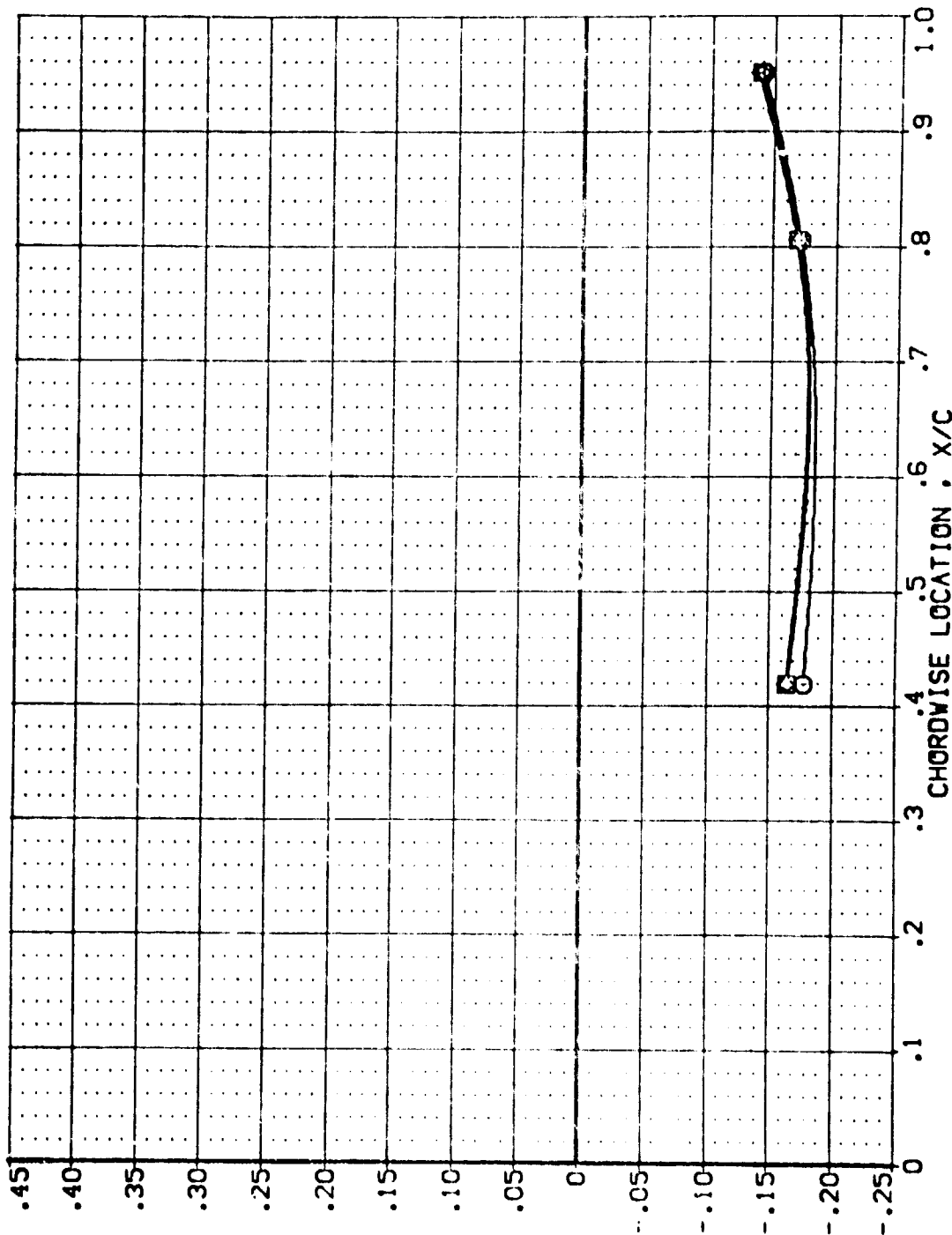
(UBZ0037)
(UBZ0038)
(UBZ0039)
(UBZ0040)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

IAIZC 01 TI SI
IAIZC 01 TI SI
IAIZC 01 TI SI
IAIZC 01 TI SI

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER GPR SQ-PR GIMBAL
.000 31.260 .916 1.000
1.000 31.260 .916 4.000
1.000 31.260 .916 1.000
1.000 31.260 .916 3.000



PRESSURE COEFFICIENT, CP

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

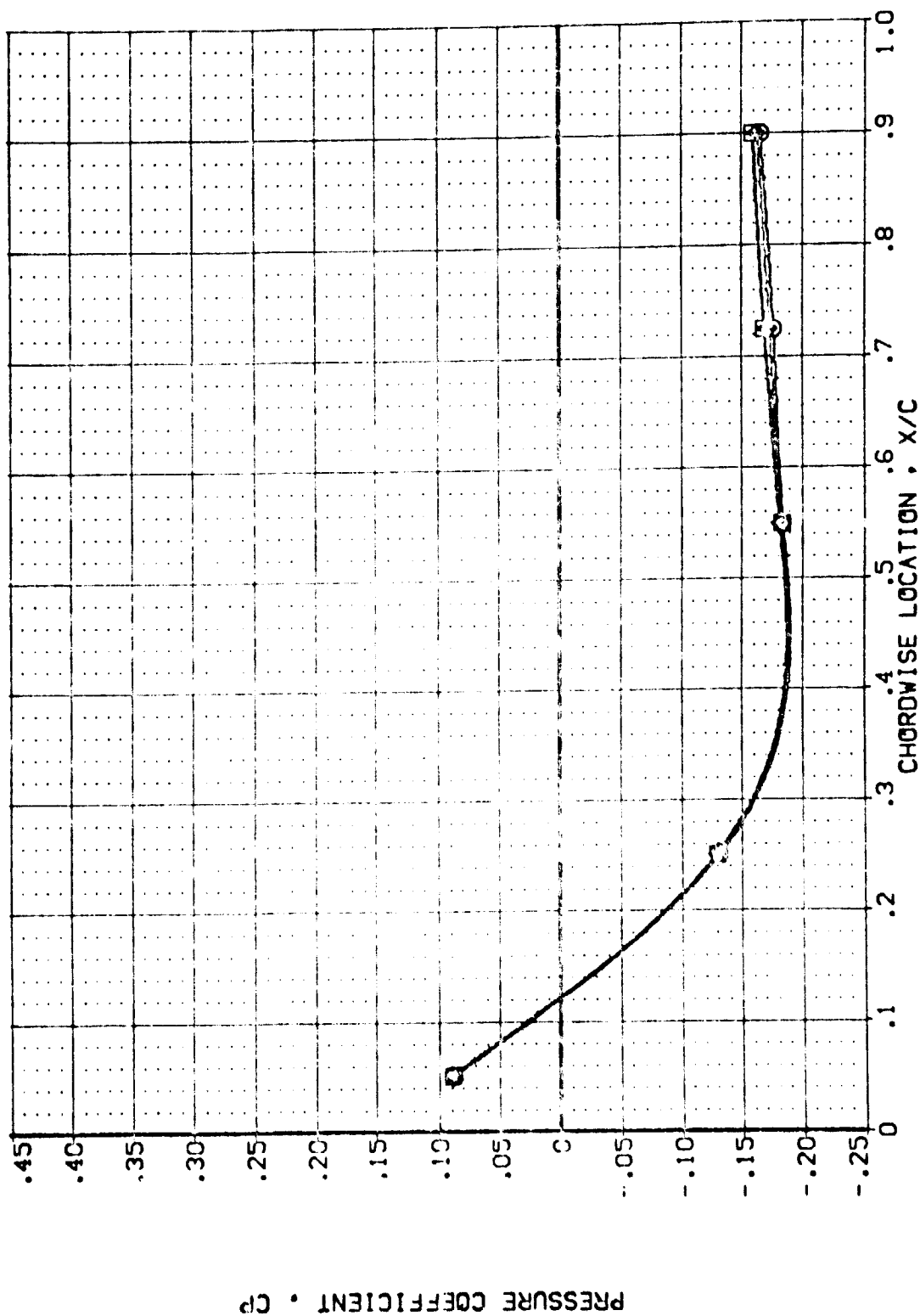
MACH = 2.500 ALPHA = 6.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ0037)
(UBZ0039)
(UBZ0034)
(UBZ0036)

AVES 87-710 [A] 2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 [A] 2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 [A] 2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 [A] 2C 01 T1 S1 UPPER WING PRESSURE

POWER DFR SR-PR GIMBAL
.000 31.260 .916 1.000
1.000 31.260 .916 4.000
1.000 31.260 .916 1.000
1.000 31.260 .916 3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

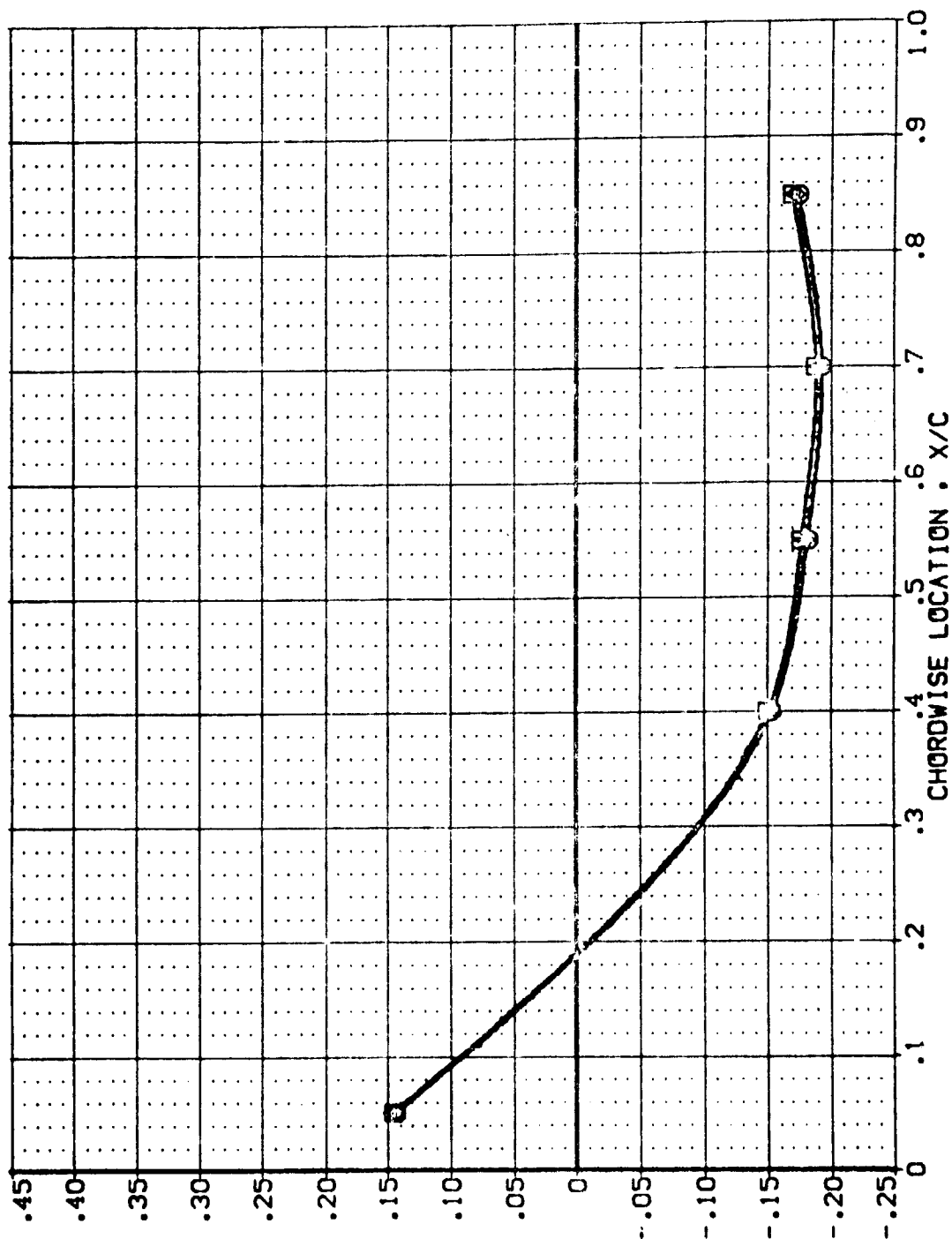
MACH = 2.500 ALPHA = 6.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ037)	AVES 87-710	IA12C	01	TI	SI	UPPER WING PRESSURE
(UBZ059)	AVES 87-710	IA12C	01	TI	SI	UPPER WING PRESSURE
(UBZ034)	AVES 87-710	IA12C	01	TI	SI	UPPER WING PRESSURE
(UBZ036)	AVES 87-710	IA12C	01	TI	SI	UPPER WING PRESSURE

POWER DFR SFR GIMBAL

.000	31.260	.916	1.000
1.000	31.260	.916	4.000
1.000	31.260	.916	1.000
1.000	31.260	.916	3.000



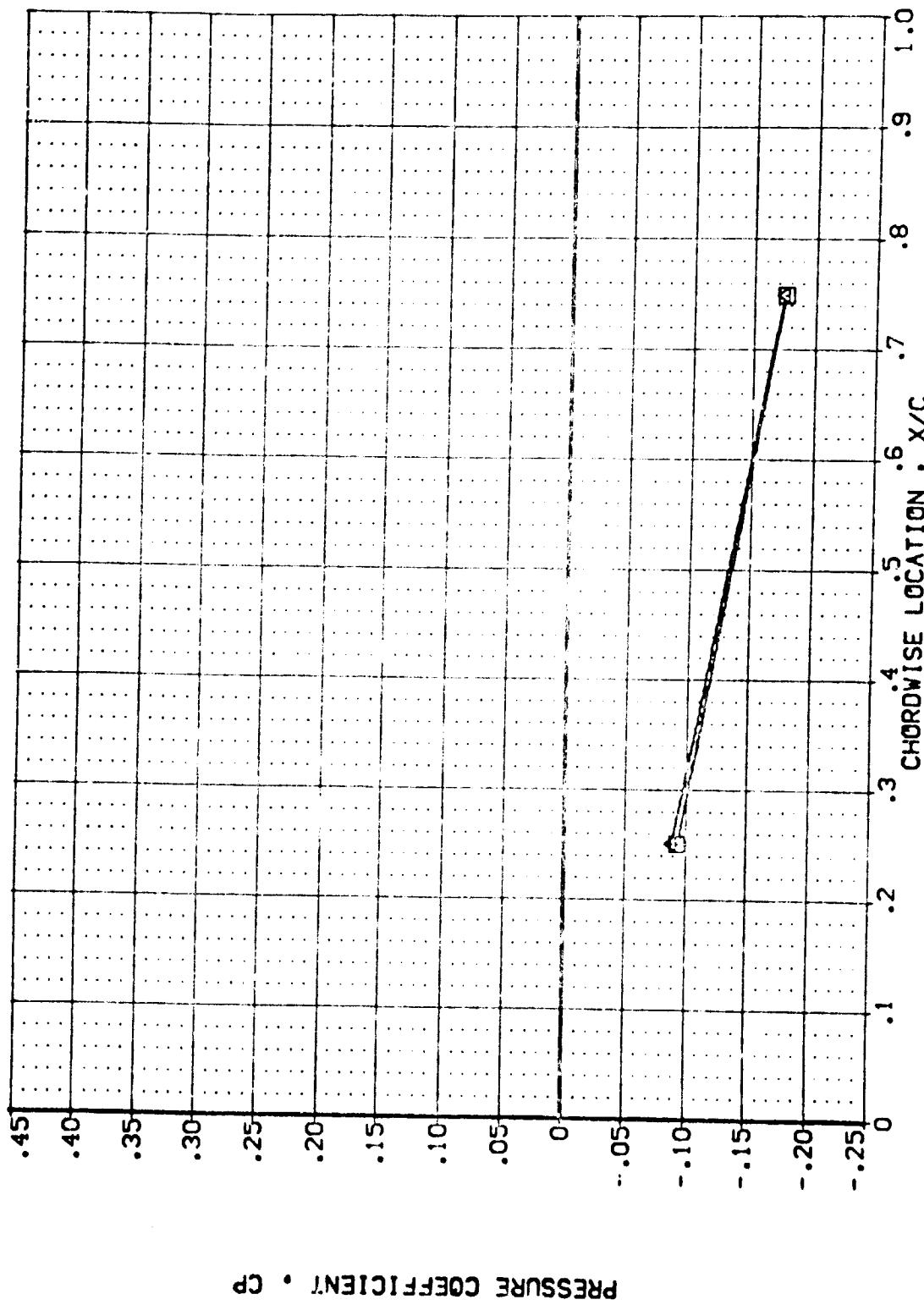
PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .673

PAGE 304

DATA SET SYMBOL CONFIGURATION DESCRIPTION

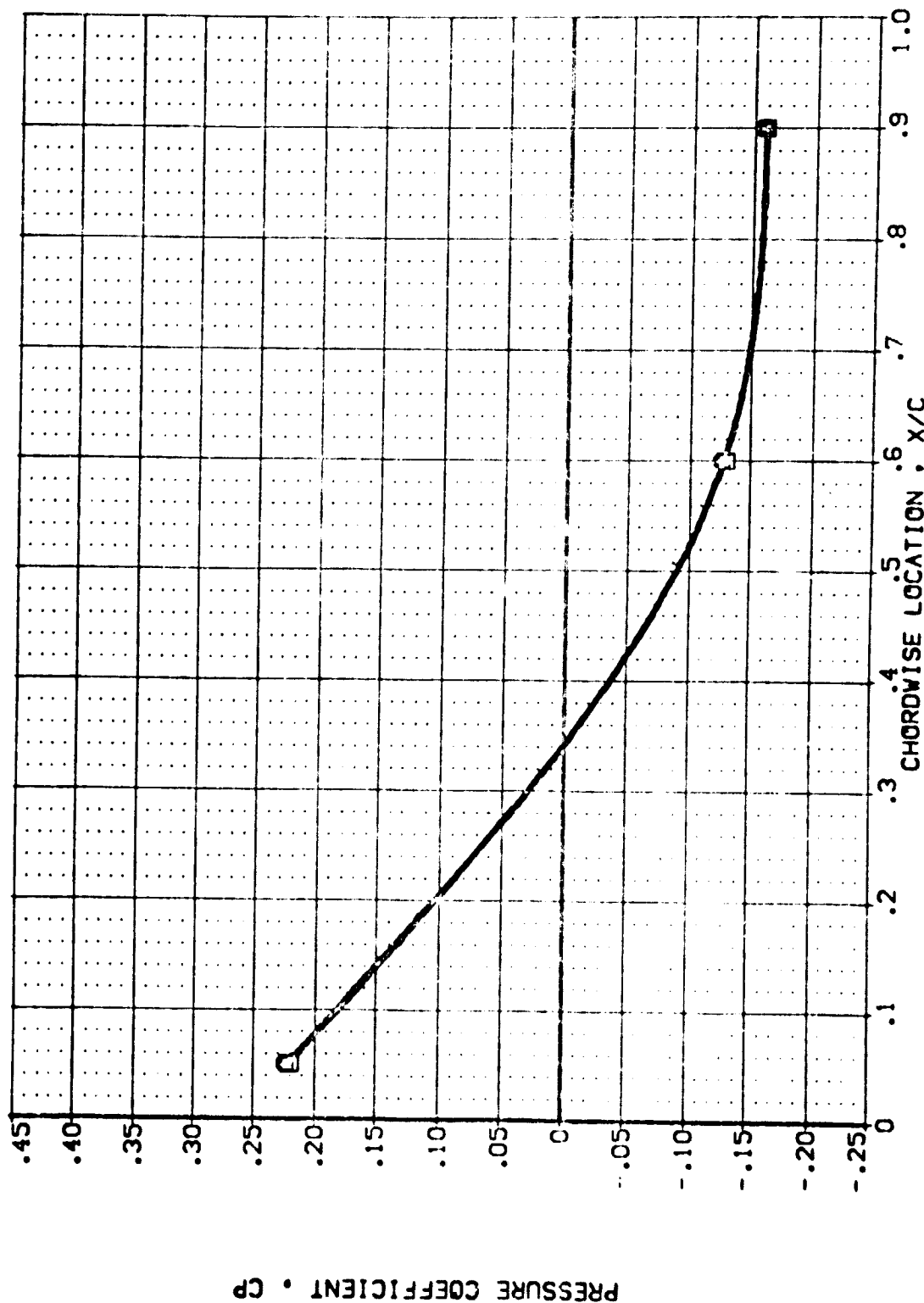
(UBZ037)	AMES 87-710	1A12C	01	11	SI	UPPER WING PRESSURE	POWER	0.000	0.000	0.000	GIMBAL	1.000
(UBZ038)	AMES 87-710	1A12C	01	11	SI	UPPER WING PRESSURE	POWER	1.000	31.260	.916	GIMBAL	4.000
(UBZ039)	AMES 87-710	1A12C	01	11	SI	UPPER WING PRESSURE	POWER	1.000	31.260	.916	GIMBAL	1.000
(UBZ040)	AMES 87-710	1A12C	01	11	SI	UPPER WING PRESSURE	POWER	1.000	31.260	.916	GIMBAL	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP
MACH = 2.500 ALPHA = 6.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UB2037) AYES 87-710 IAL2C 01 T1 S1
 (UB2038) AYES 87-710 IAL2C 01 T1 S1
 (UB2039) AYES 87-710 IAL2C 01 T1 S1
 (UB2040) AYES 87-710 IAL2C 01 T1 S1
 (UB2041) AYES 87-710 IAL2C 01 T1 S1
 (UB2042) AYES 87-710 IAL2C 01 T1 S1

POWER C/P 30-PR GIMBAL
 .000 .916 1.000
 1.000 31.260 4.000
 1.000 31.260 1.000
 1.000 31.260 3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP
 MACH = 2.500 ALPHA = 6.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

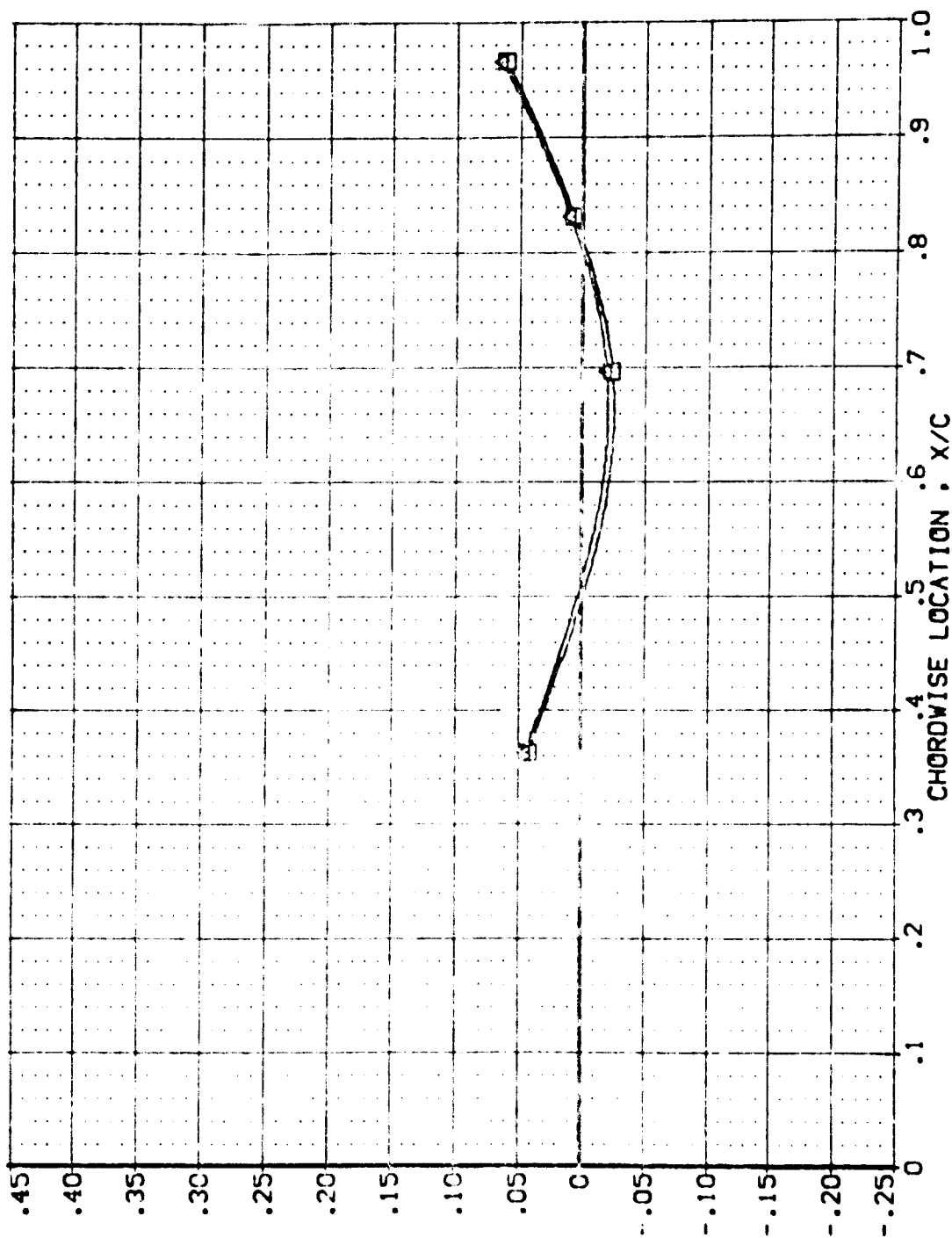
(U820038)
(U821003)
(U820041)
(U820088)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER .000
GPR 26.8620
SMPR .768
GIMBAL 1.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .299

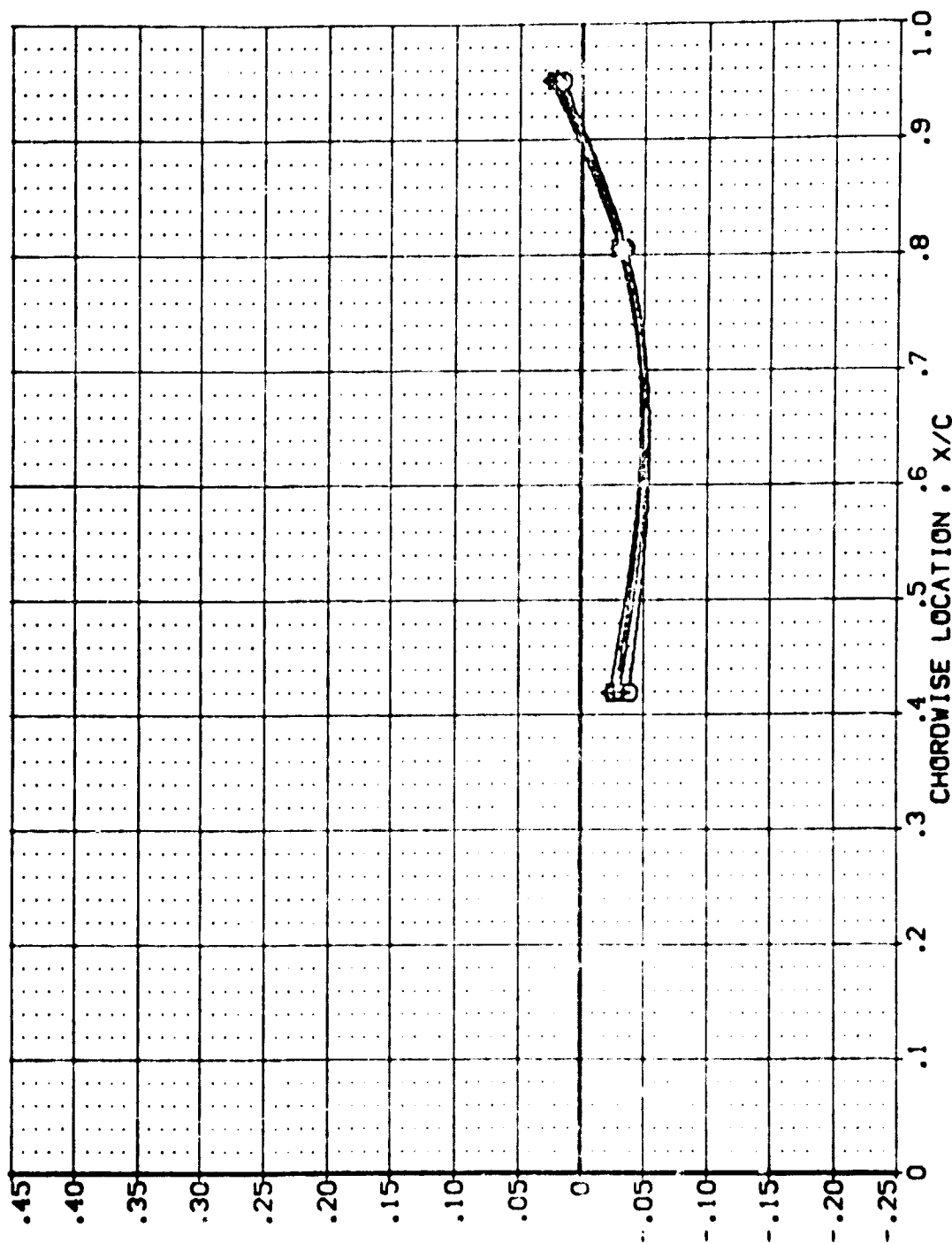
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ008)
(UBZ103)
(UBZD41)
(UBZ008)

AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER 1.000
DPR 26.860
SPWR 768
GIMBAL 1.000
1.000
1.000
3.000

PRESSURE COEFFICIENT, CP



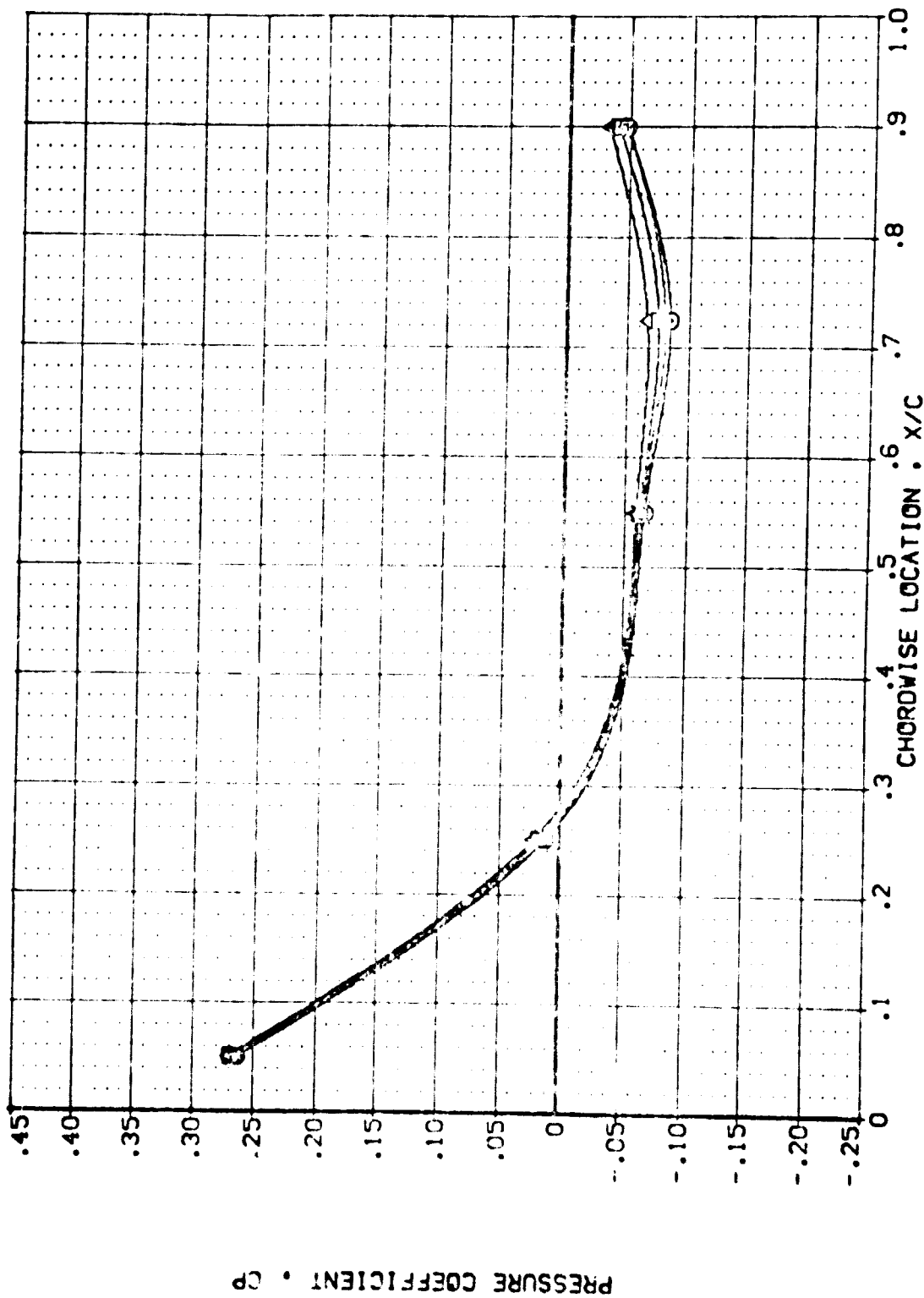
CHORDWISE LOCATION, X/C

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CFR	SWPR	GIMBAL
(LWZ008)	AVES 87-710 1A1ZC 01 T1 S1 UPPER VING PRESSURE	.000			1.000
(LWZ103)	AVES 87-710 1A1ZC 01 T1 S1 UPPER VING PRESSURE	1.000	26.860	.768	4.000
(LWZ041)	AVES 87-710 1A1ZC 01 T1 S1 UPPER VING PRESSURE	1.000	26.860	.768	1.000
(LWZ088)	AVES 87-710 1A1ZC 01 T1 S1 UPPER VING PRESSURE	1.000	26.860	.768	3.000

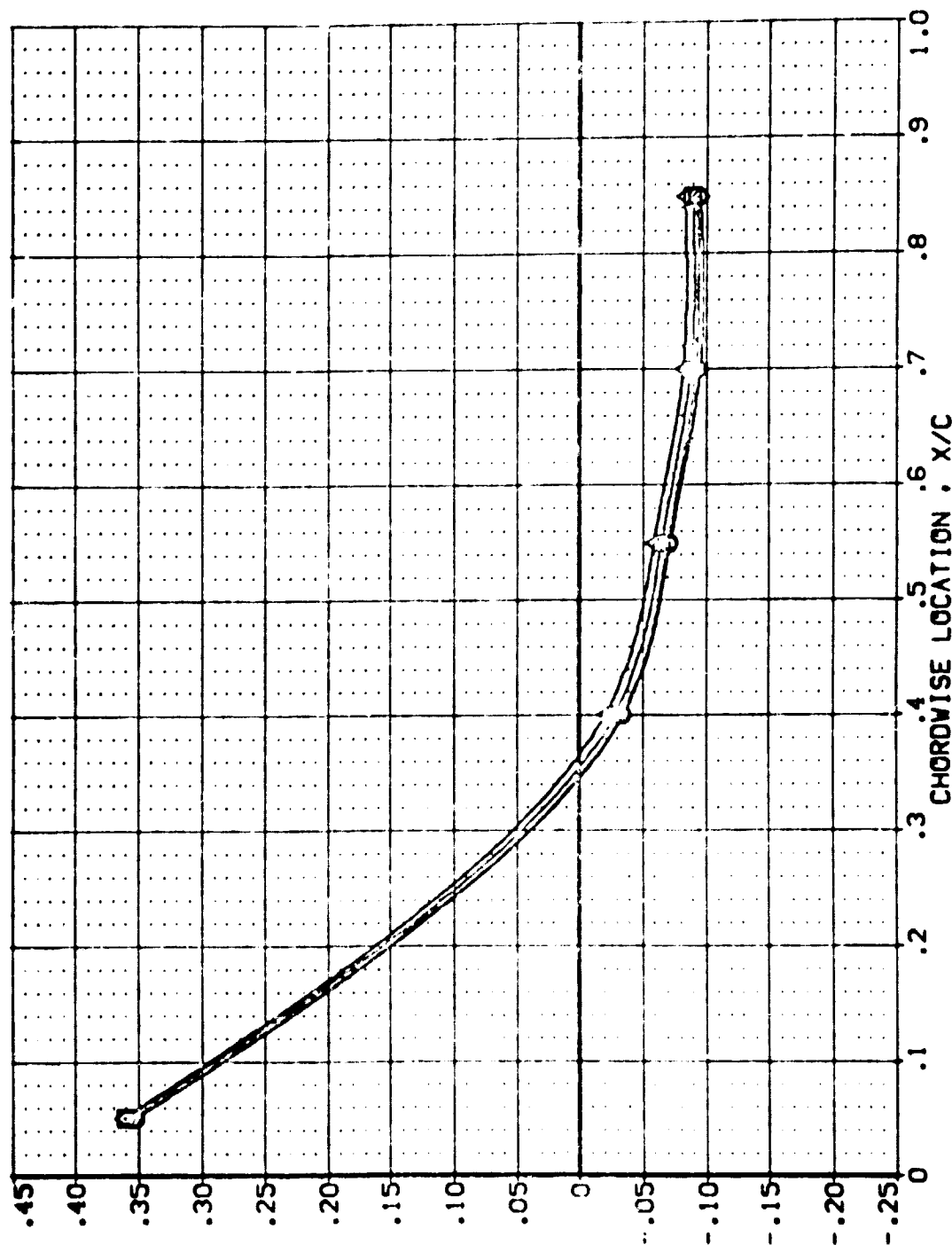


PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZ008) AYES 67-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ103) AYES 67-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ041) AYES 67-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ008) AYES 67-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER C/P R S/P R GIMBAL
 .000 26.860 .763 1.000
 1.000 26.860 .763 4.000
 1.000 26.860 .763 1.000
 1.000 26.860 .763 3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

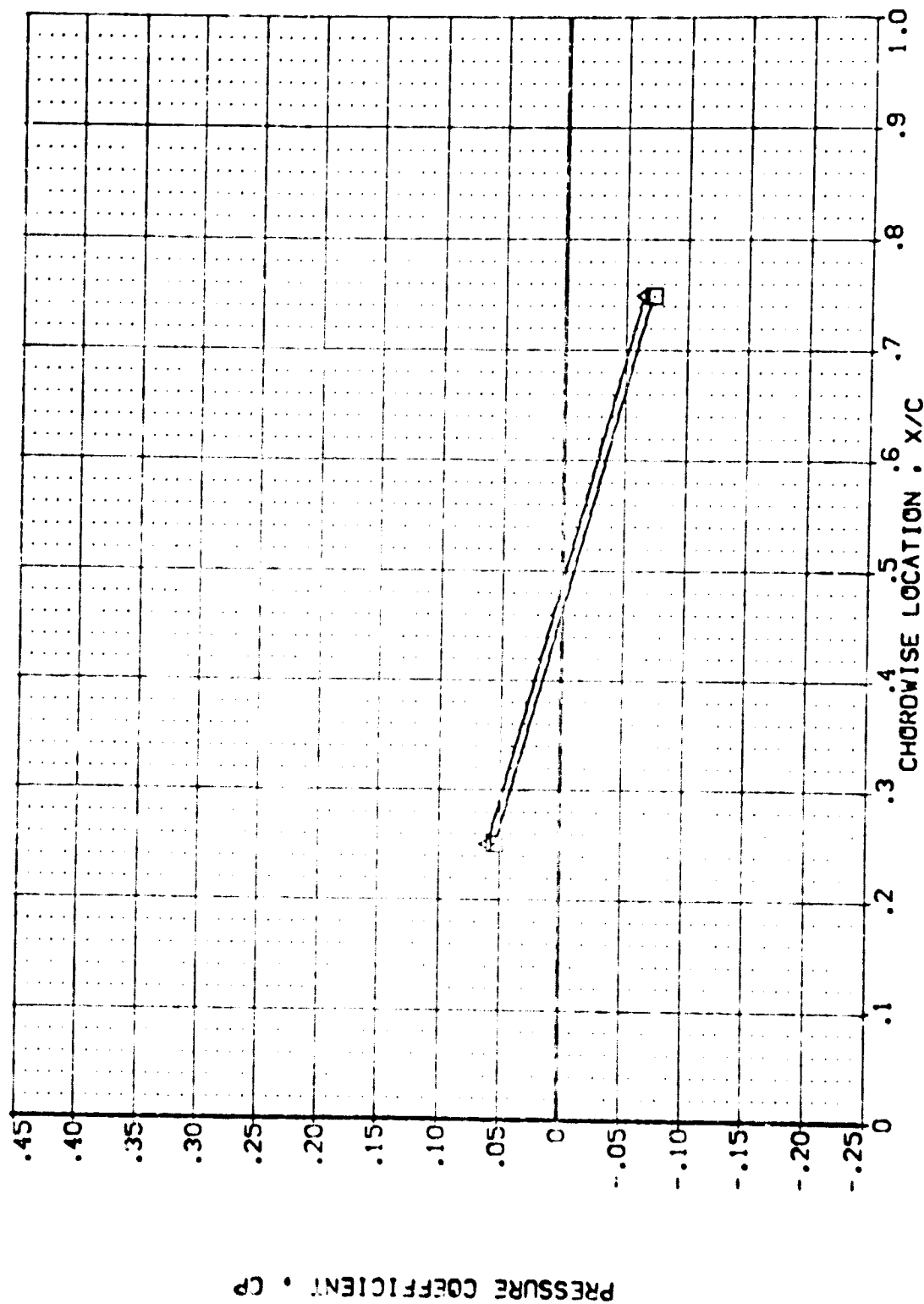
MACH = 3.000 ALPHA = -8.000 Y/B = .673

PAGE 310

(U.S. 7000)
(U.S. 7100)
(U.S. 7200)
(U.S. 7300)

ANES	BT-710	IA:2C	01	T1	SI	UPPER	VIND	PRESSURE
ANES	BT-710	IA:2C	01	T1	SI	UPPER	VIND	PRESSURE
ANES	BT-710	IA:2C	01	T1	SI	UPPER	VIND	PRESSURE
ANES	BT-710	IA:2C	01	T1	SI	UPPER	VIND	PRESSURE

POWER	OPR	STPR	SHRDL
.000			1.000
1.000	26.860	.763	4.000
1.000	26.860	.763	1.000
1.000	26.860	.763	3.000



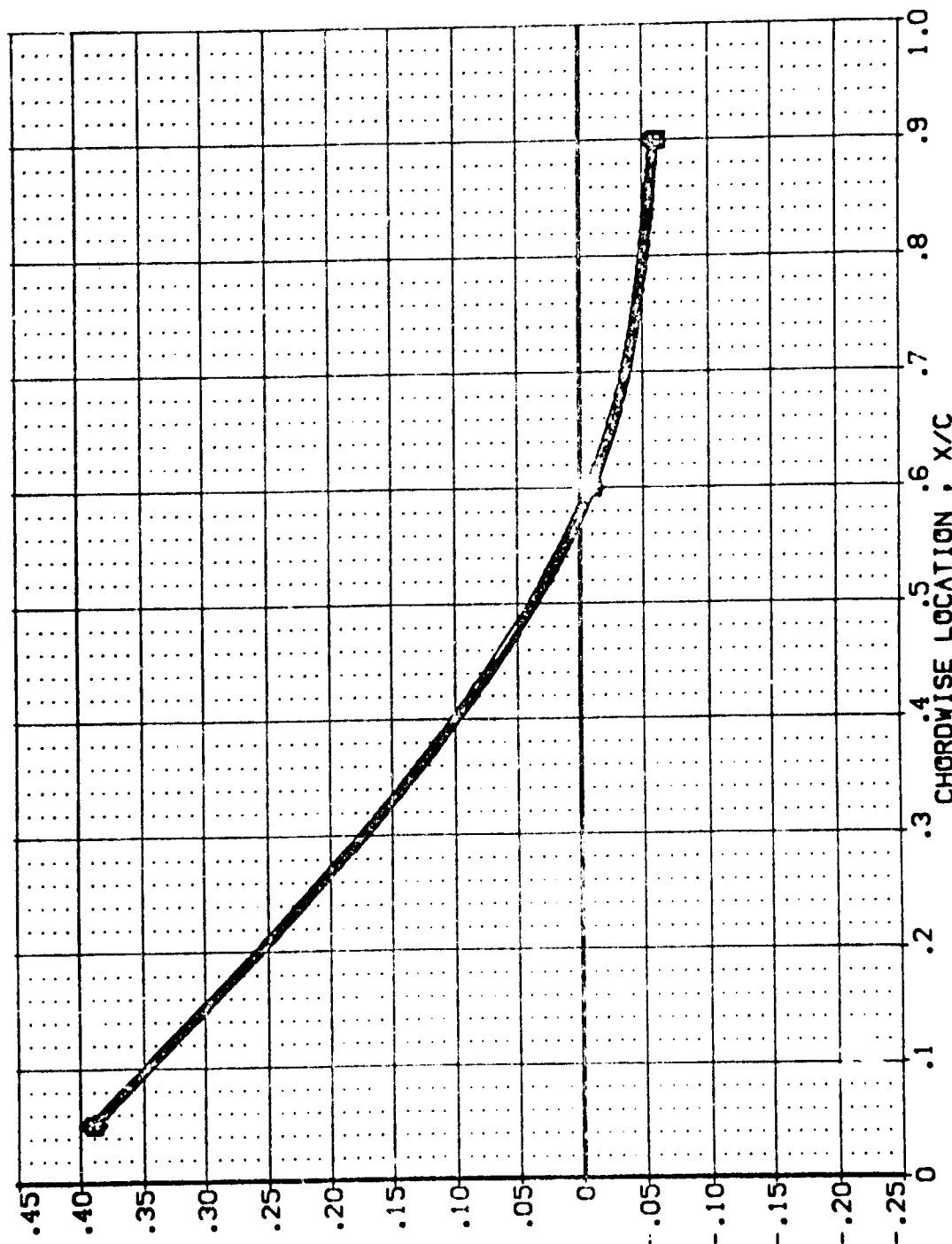
PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH	=	3.000	ALPHA	=	-8.000	Y/B	=	.780
------	---	-------	-------	---	--------	-----	---	------

PAGE 311

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZ008) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ103) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ041) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ088) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER CTR SFRFR GIMBAL
 1.000 26.860 .768 1.000
 1.000 26.860 .768 4.000
 1.000 26.860 .768 1.000
 1.000 26.860 .768 3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP
 MACH = 3.000 ALPHA = -8.000 Y/B = .887
 PAGE 312

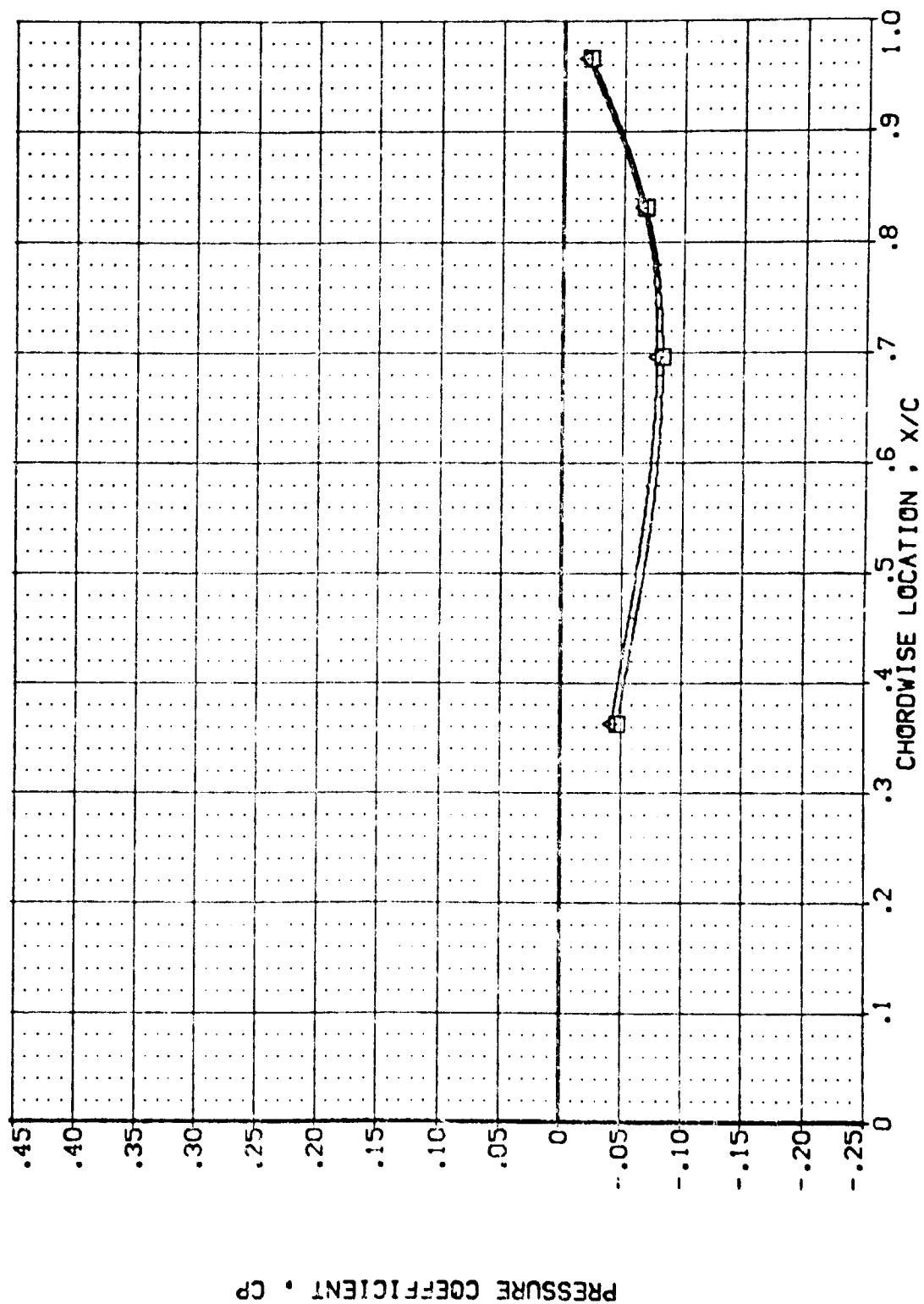
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CPR SR-PR GIMBAL

(UB2008) AYES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE .000 26.860 .768 1.000

(UB2103) AYES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE 1.000 26.860 .768 4.000

(UB2041) AYES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE 1.000 26.860 .768 1.000

(UB2088) AYES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE 1.000 26.860 .768 3.000

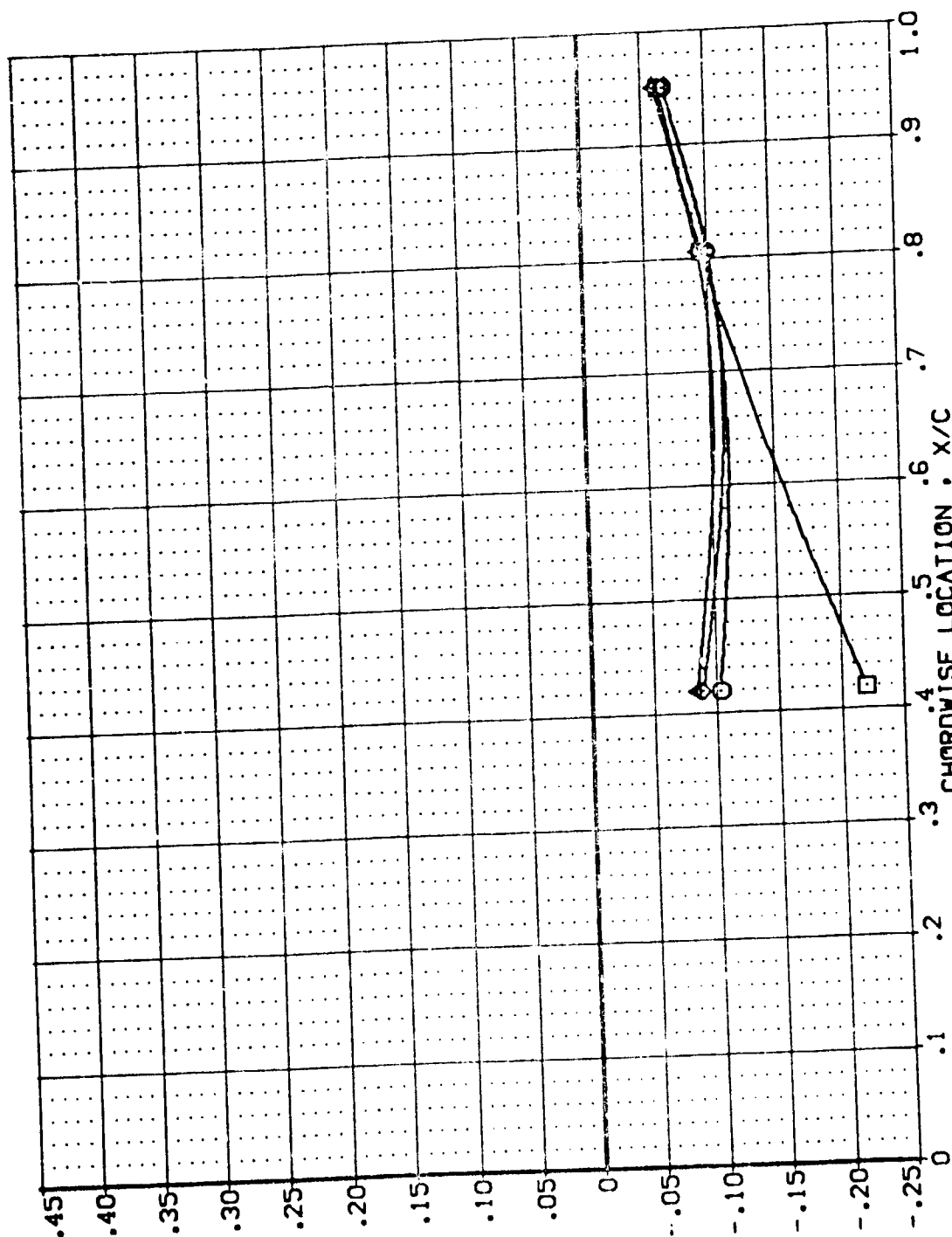


PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .299 PAGE 313

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UB2038) AYES 67-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UB2103) AYES 67-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UB2041) AYES 67-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UB2068) AYES 67-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER D/R S/R GIMBAL
 .000 26.860 .768 1.000
 1.000 26.860 .768 1.000
 1.000 26.860 .768 1.000

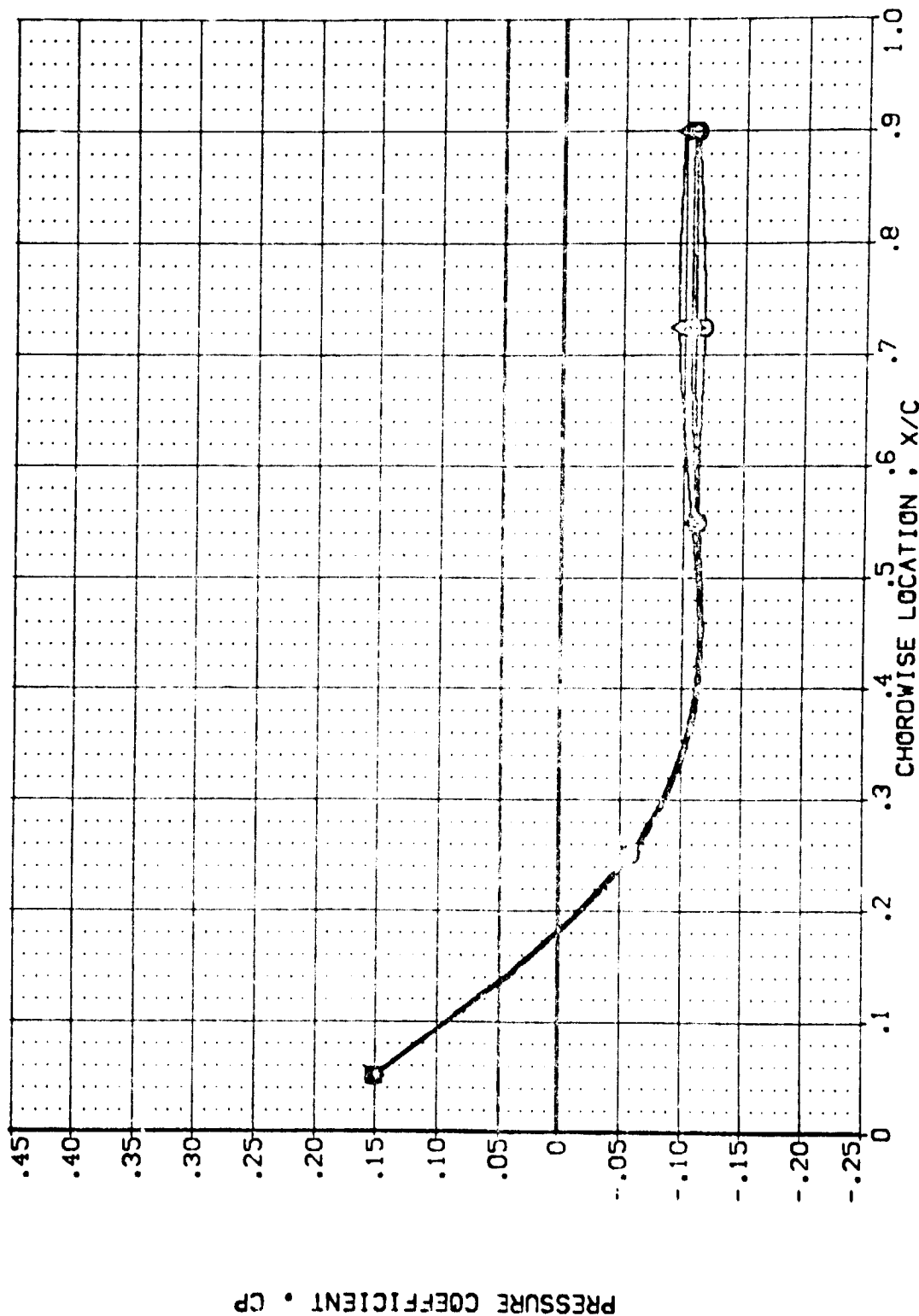


PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C
 PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP
 MACH = 3.000 ALPHA = .000 Y/B = .427
 PAGE 314

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SEWER	GIMBAL
{UBZ028}	AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	.000			1.000
{UBZ103}	AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	1.000	26.860	.768	4.000
{UBZ041}	AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	1.000	26.860	.768	1.000
{UBZ088}	AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	1.000	26.860	.768	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ008)
(UBZ103)
(UBZ041)
(UBZ008)

Q
X

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 TI SI
IA12C 01 TI SI
IA12C 01 TI SI
IA12C 01 TI SI

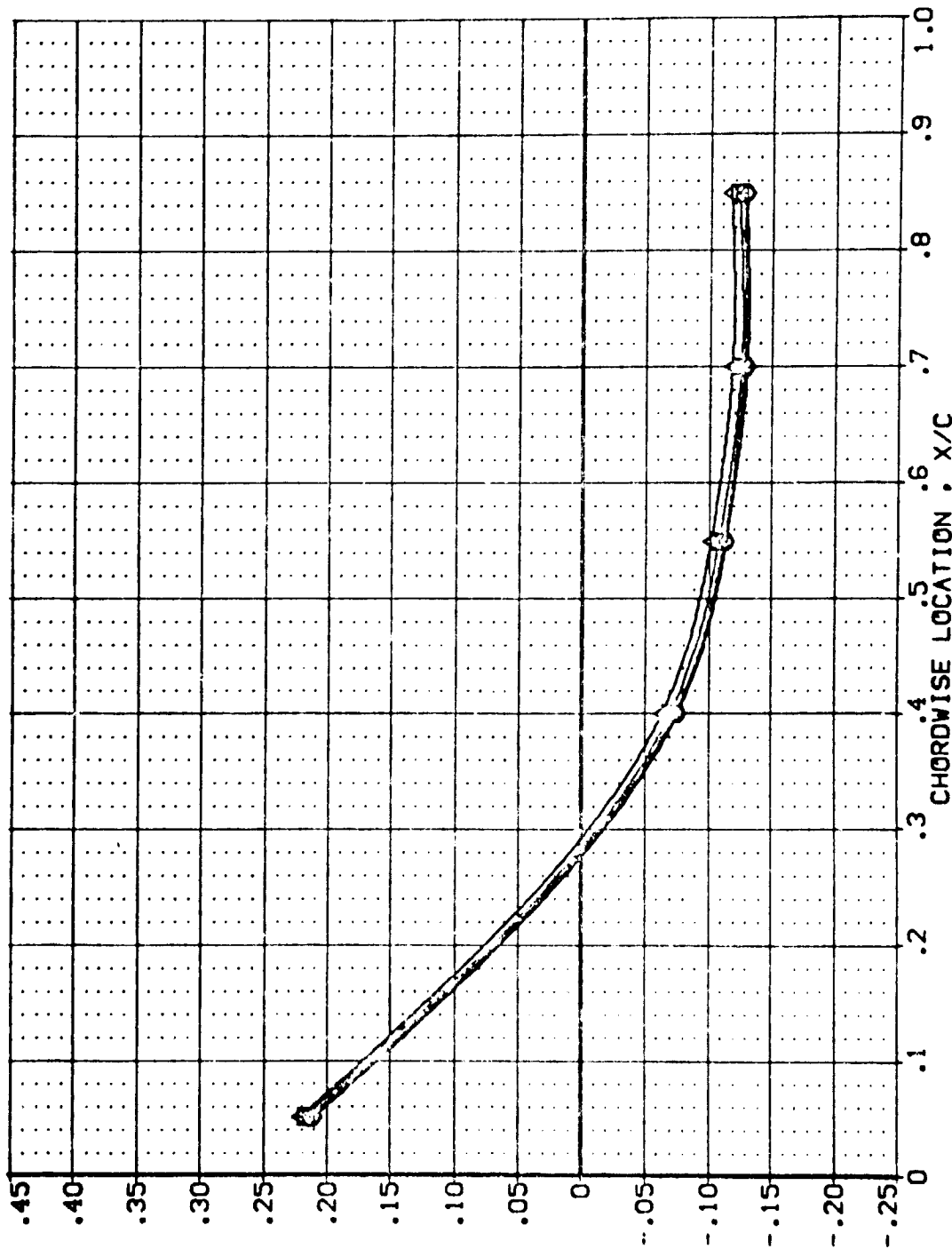
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER
1.000
1.000
1.000
1.000

CFR
26.860
26.860
26.860
26.860

SWFR
.768
.768
.768
.768

GIMBAL
1.000
4.000
1.000
3.000

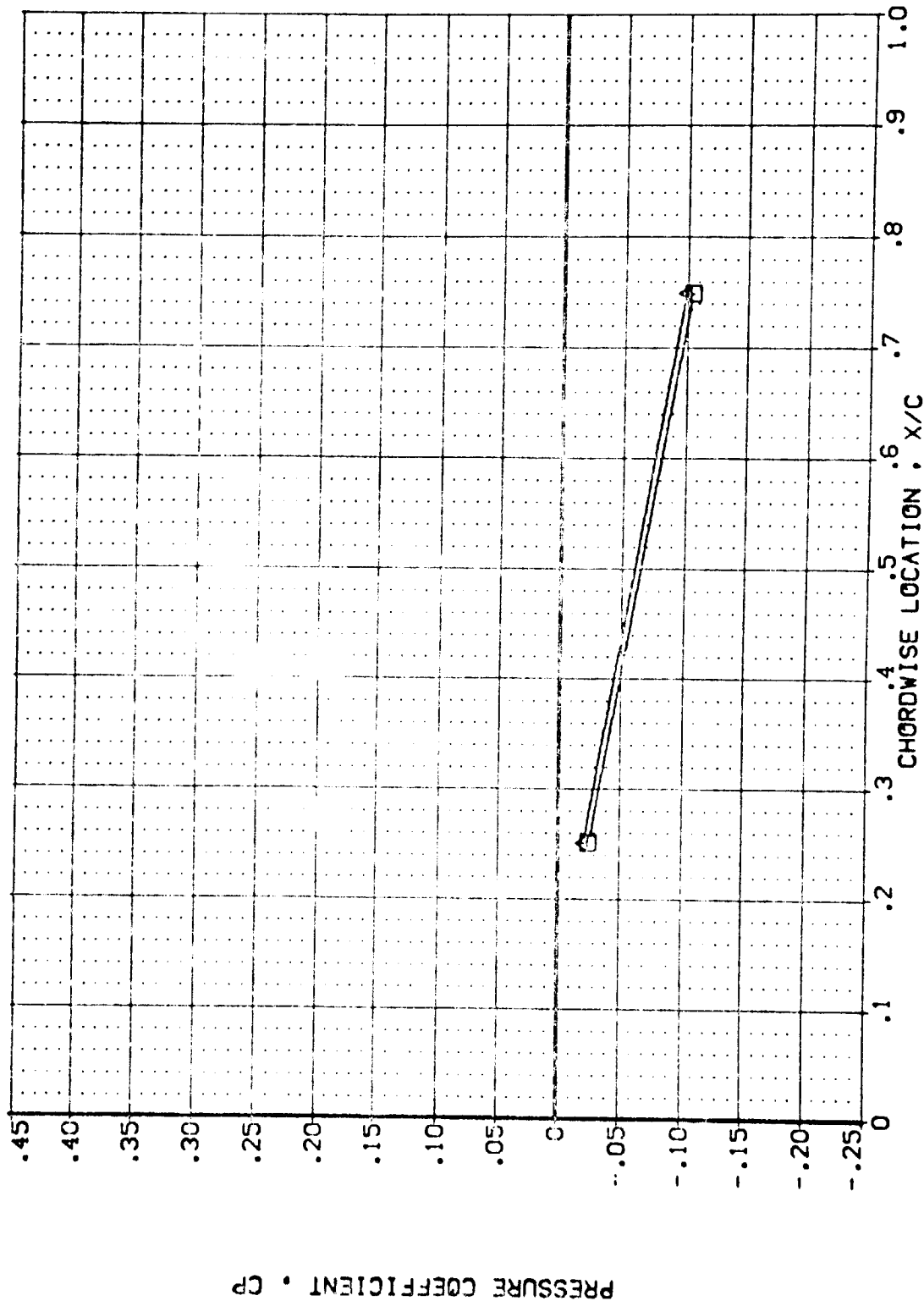


PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .673 PAGE 316

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ038)	AMES 87-710	1A12C	01	T	SI	UPPER WING PRESSURE	POWER	0PR	SWPR	GIMBAL
(UBZ103)	AMES 87-710	1A12C	01	T	SI	UPPER WING PRESSURE	.000			1.000
(UBZ041)	AMES 87-710	1A12C	01	T	SI	UPPER WING PRESSURE	1.000	26.860	.758	4.000
(UBZ088)	AMES 87-710	1A12C	01	T	SI	UPPER WING PRESSURE	1.000	26.860	.758	1.000
							1.000	26.860	.758	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

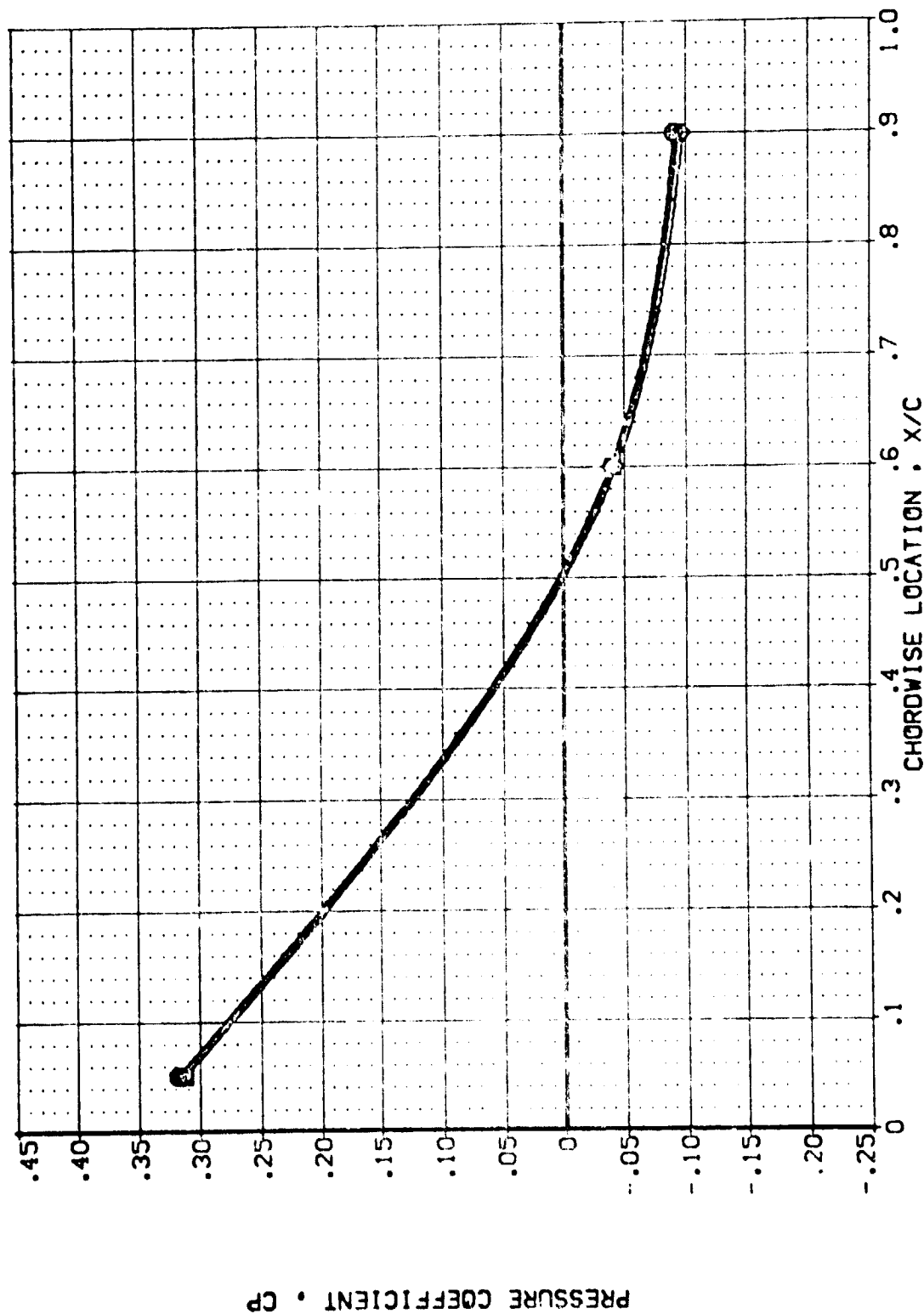
MACH = 3.000 ALPHA = .000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(UBZ008)	AVES 87-710 IAI2C 01 T1 S1
(UBZ103)	AVES 87-710 IAI2C 01 T1 S1
(UBZ041)	AVES 87-710 IAI2C 01 T1 S1
(UBZ086)	AVES 87-710 IAI2C 31 T1 S1

POWER GPR SGRFR GIMBAL

POWER	GPR	SGRFR	GIMBAL
.000	26.860	.768	1.000
1.000	26.860	.768	4.000
1.000	26.860	.768	1.000
1.000	26.860	.768	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .887

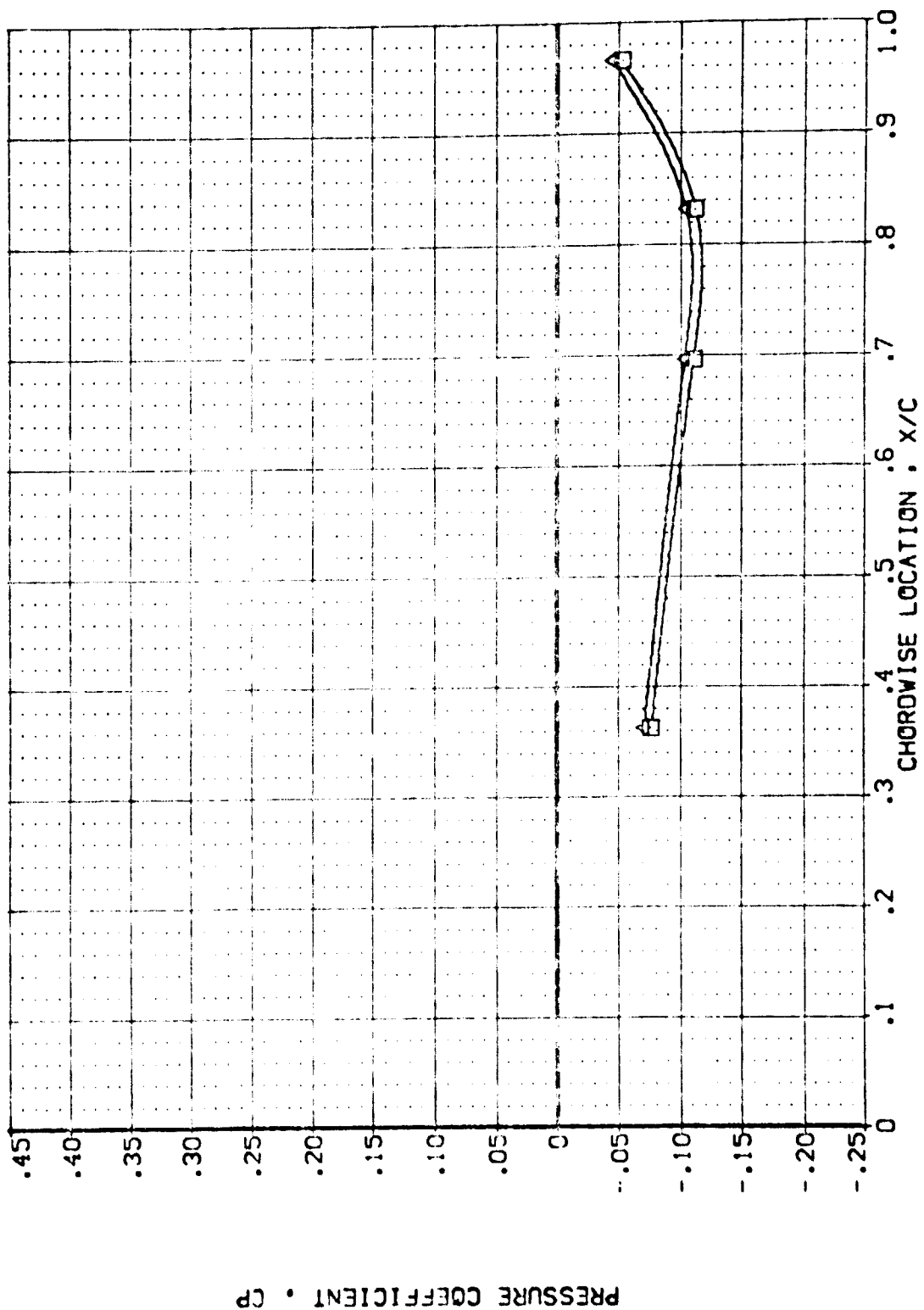
PAGE 318

DATA SET SYMBOL CONFIGURATION DESCRIPTION

{UBZ008}  {UBZ103}  {UBZ041}  {UBZ068}

AVES 87-710 [A]ZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 [A]ZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 [A]ZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 [A]ZC 01 T1 S1 UPPER WING PRESSURE

POWER 1.000 26.860 26.860 26.860
SPPR 1.000 .768 .768 .768
GIMBAL 1.000 4.000 1.000 3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .299

(UBZ030)
 (UBZ103)
 (UBZ041)
 (UBZ038)

CONFIGURATION	DESCRIPTION
1	...
2	...
3	...
4	...
5	...
6	...
7	...
8	...
9	...
10	...
11	...
12	...
13	...
14	...
15	...
16	...
17	...
18	...
19	...
20	...
21	...
22	...
23	...
24	...
25	...
26	...
27	...
28	...
29	...
30	...
31	...
32	...
33	...
34	...
35	...
36	...
37	...
38	...
39	...
40	...
41	...
42	...
43	...
44	...
45	...
46	...
47	...
48	...
49	...
50	...
51	...
52	...
53	...
54	...
55	...
56	...
57	...
58	...
59	...
60	...
61	...
62	...
63	...
64	...
65	...
66	...
67	...
68	...
69	...
70	...
71	...
72	...
73	...
74	...
75	...
76	...
77	...
78	...
79	...
80	...
81	...
82	...
83	...
84	...
85	...
86	...
87	...
88	...
89	...
90	...
91	...
92	...
93	...
94	...
95	...
96	...
97	...
98	...
99	...
100	...

AMES	87-710	1A12C	01	T1	SI	UPPER	VING	PRESSURE
AMES	87-710	1A12C	01	T1	SI	UPPER	VING	PRESSURE
AMES	87-710	1A12C	01	T1	SI	UPPER	VING	PRESSURE
AMES	87-710	1A12C	01	T1	SI	UPPER	VING	PRESSURE
AMES	87-710	1A12C	01	T1	SI	UPPER	VING	PRESSURE

POWER

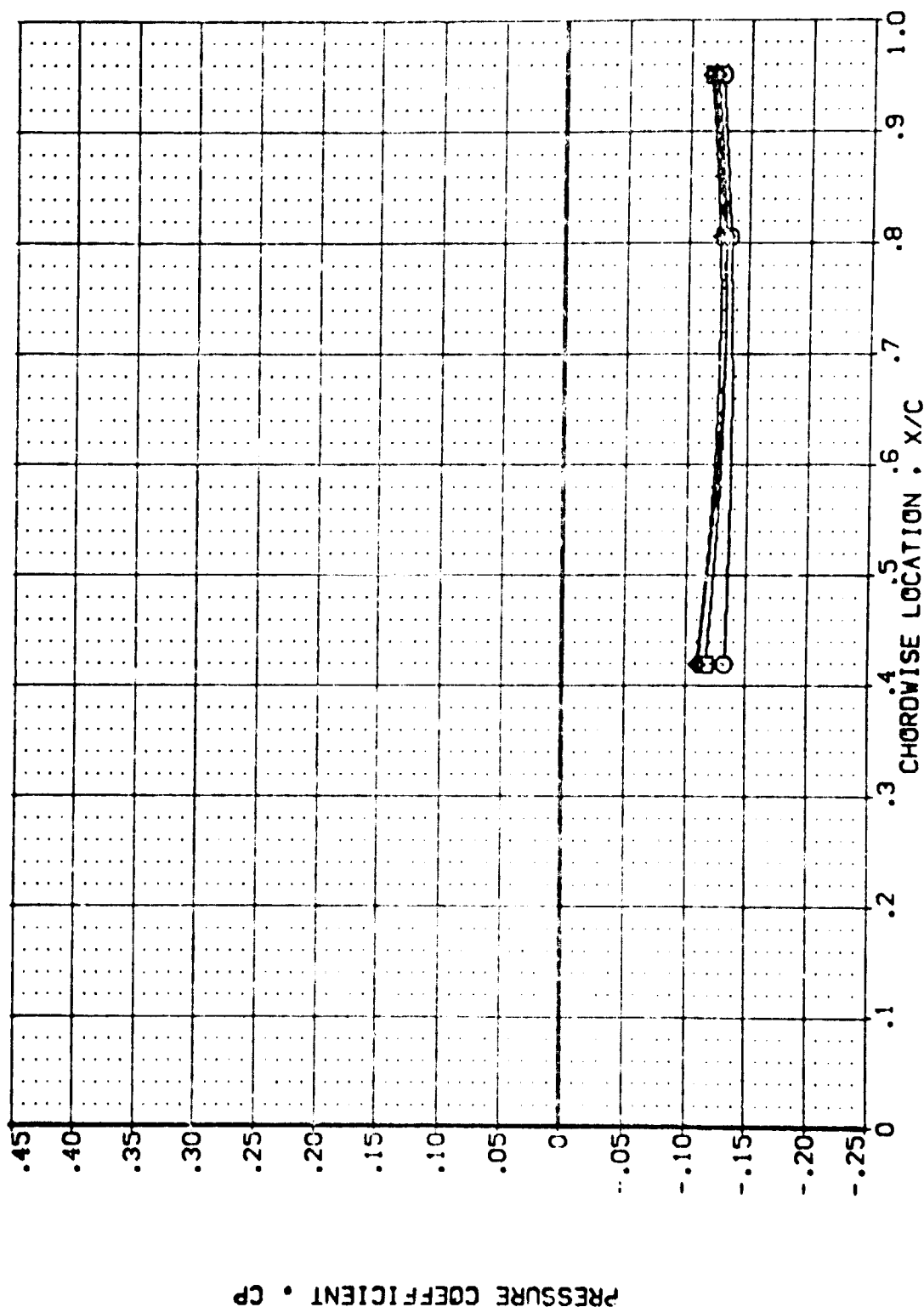
8888
8888

8

768	038
.768	039
.768	039
.768	039

NAME:

88888
-14-3-



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

$$\text{MACH} = 3.000 \quad \text{ALPHA} = 8.000 \quad \text{Y/B} = .427$$

PAGE 320

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ008)
(UBZ103)
(UBZ041)
(UBZ008)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 TI SI
IA12C 01 TI SI
IA12C 01 TI SI
IA12C 01 TI SI

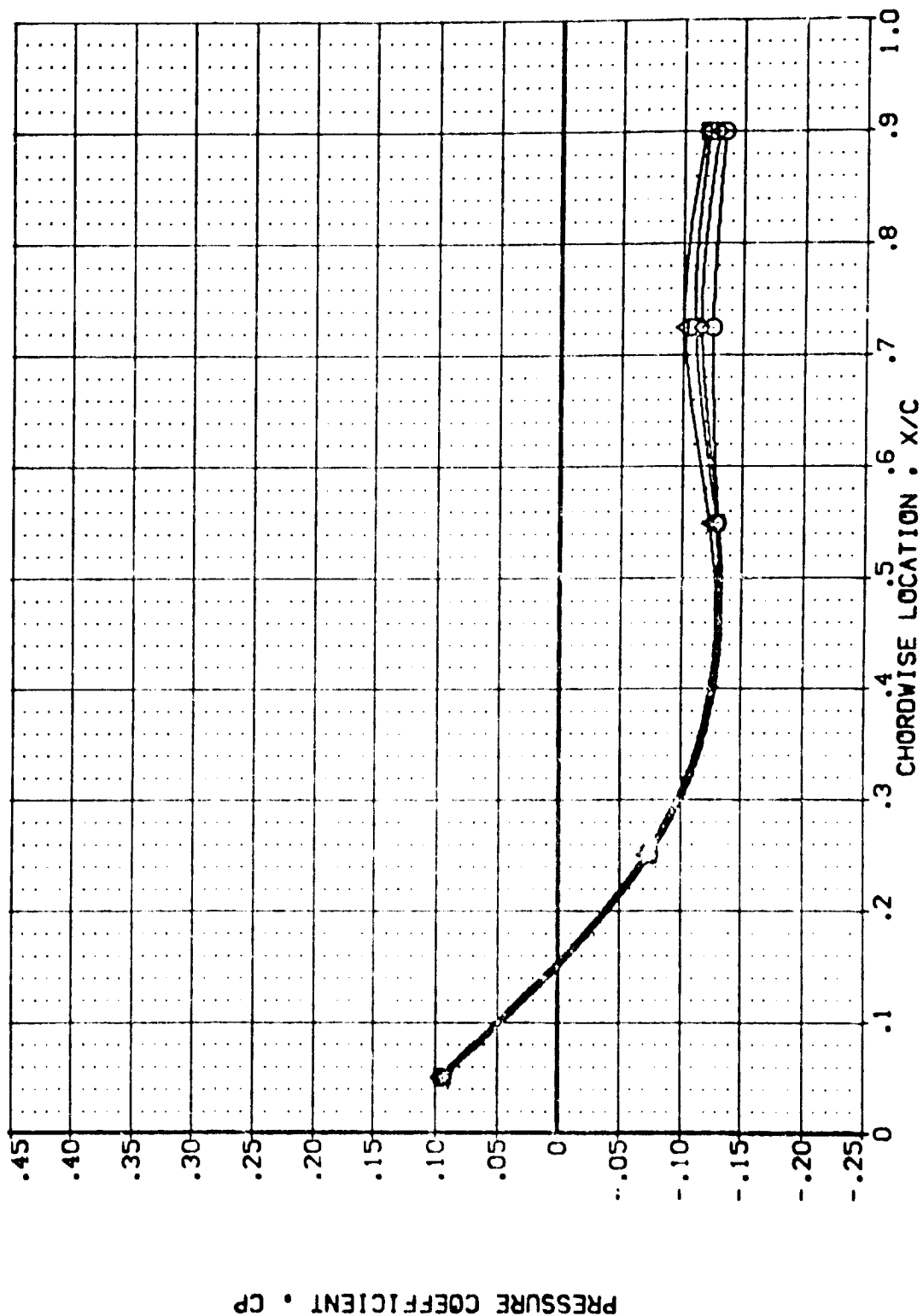
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER 0.000
1.000
1.000
1.000

GPR 26.860
26.860
26.860
26.860

STPRR .768
.768
.768
.768

GIMBAL 1.000
4.000
1.000
3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL
(UBZ008)
(UBZ100)
(UBZ041)
(UBZ008)

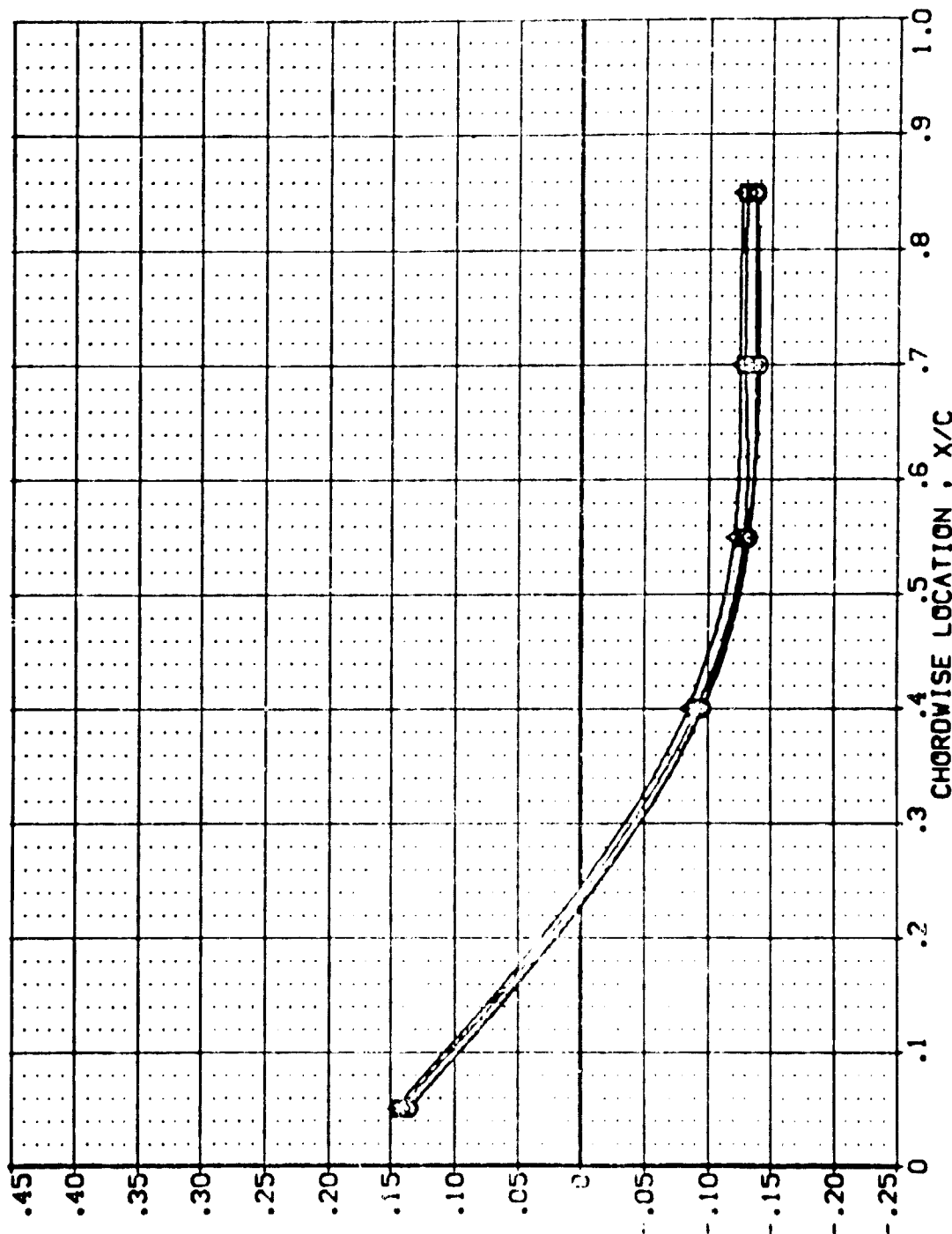
CONFIGURATION DESCRIPTION
AVES 87-710 IAI2C 01 T1 S1
AVES 87-710 IAI2C 01 T1 S1
AVES 87-710 IAI2C 01 T1 S1
AVES 87-710 IAI2C 01 T1 S1

POWER
.000
1.000
1.000
1.000

CPR
26.850
26.850
26.850

SGPR
.758
.758
.758

GIMBAL
1.000
4.000
1.000
3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

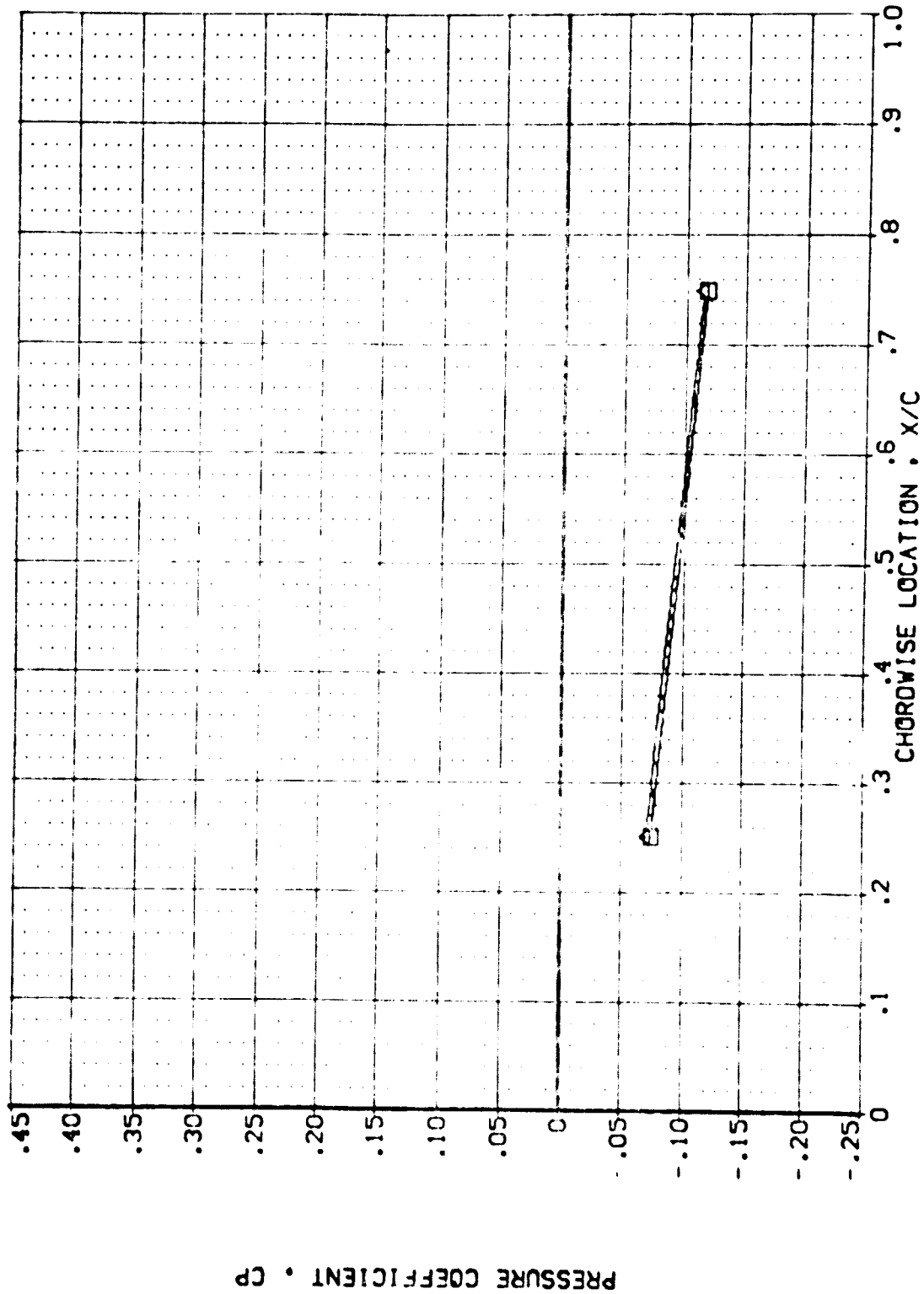
MACH = 3.000 ALPHA = 8.000 Y/B = .673

PAGE 322

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ008)	AVES 87-710	IA12C 01	TI S1	UPPER WING PRESSURE
(UBZ103)	AVES 87-710	IA12C 01	TI S1	UPPER WING PRESSURE
(UBZ0A1)	AVES 87-710	IA12C 01	TI S1	UPPER WING PRESSURE
(UBZ0B8)	AVES 87-710	IA12C 01	TI S1	UPPER WING PRESSURE

POWER	OPR	SPRFR	GIMBAL
.000	26.860	.768	1.000
1.000	26.860	.768	1.000
1.000	26.860	.768	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

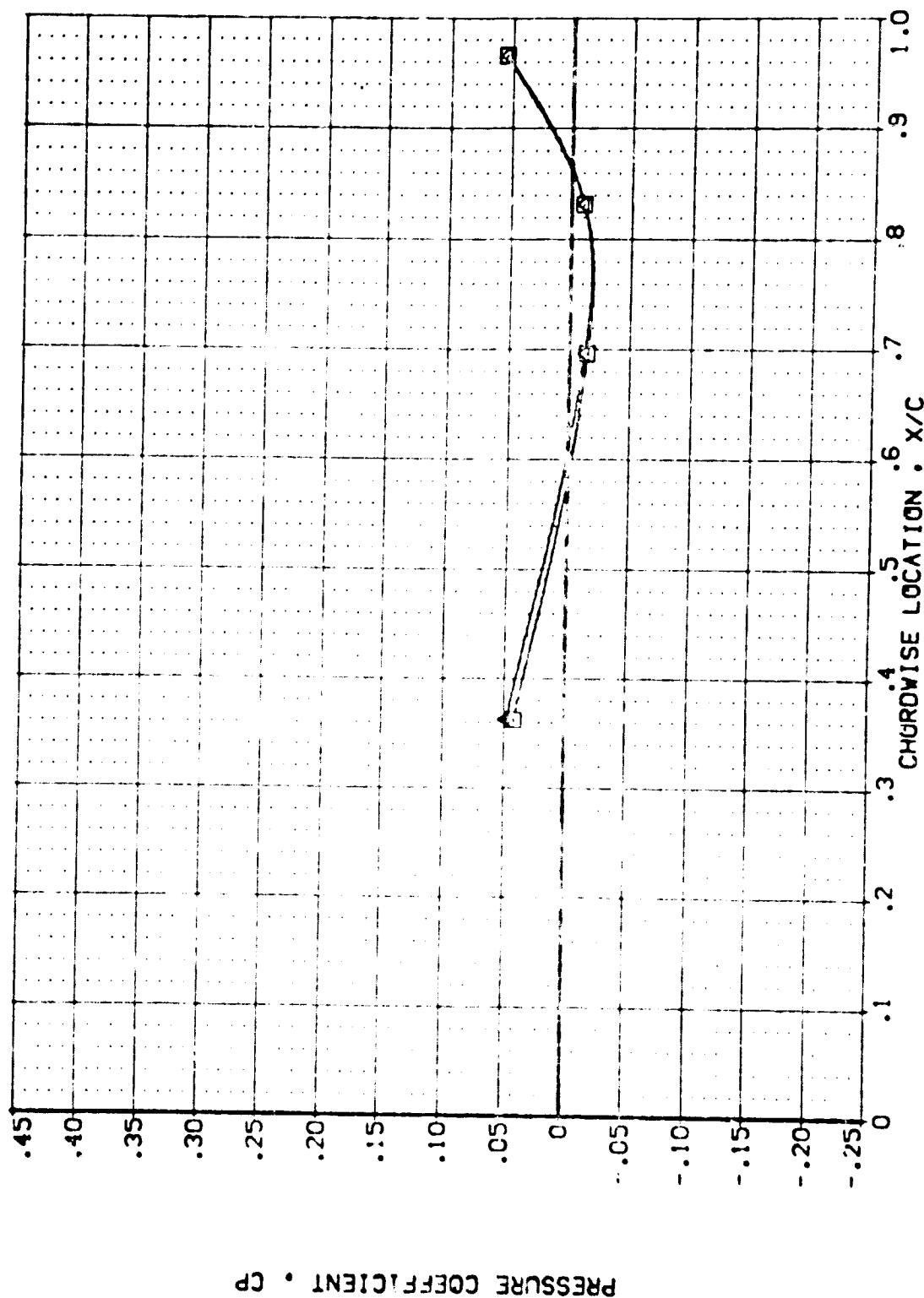
(UBZ046)
(UBZ107)
(UBZ050)
(UBZ052)

AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

AI2C 01 TI SI
AI2C 01 TI SI
AI2C 01 TI SI
AI2C 01 TI SI

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER C/P S/P/R GIMBAL
.000
1.000 23.860
1.000 .826
1.000 23.860
1.000 .826



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL

{UBZD48}
{UBZ107}
{UBZ050}
{UBZ082}

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

CONFIGURATION DESCRIPTION
IA12C 01 TI S1
IA12C 01 TI S1
IA12C 01 TI S1
IA12C 01 TI S1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

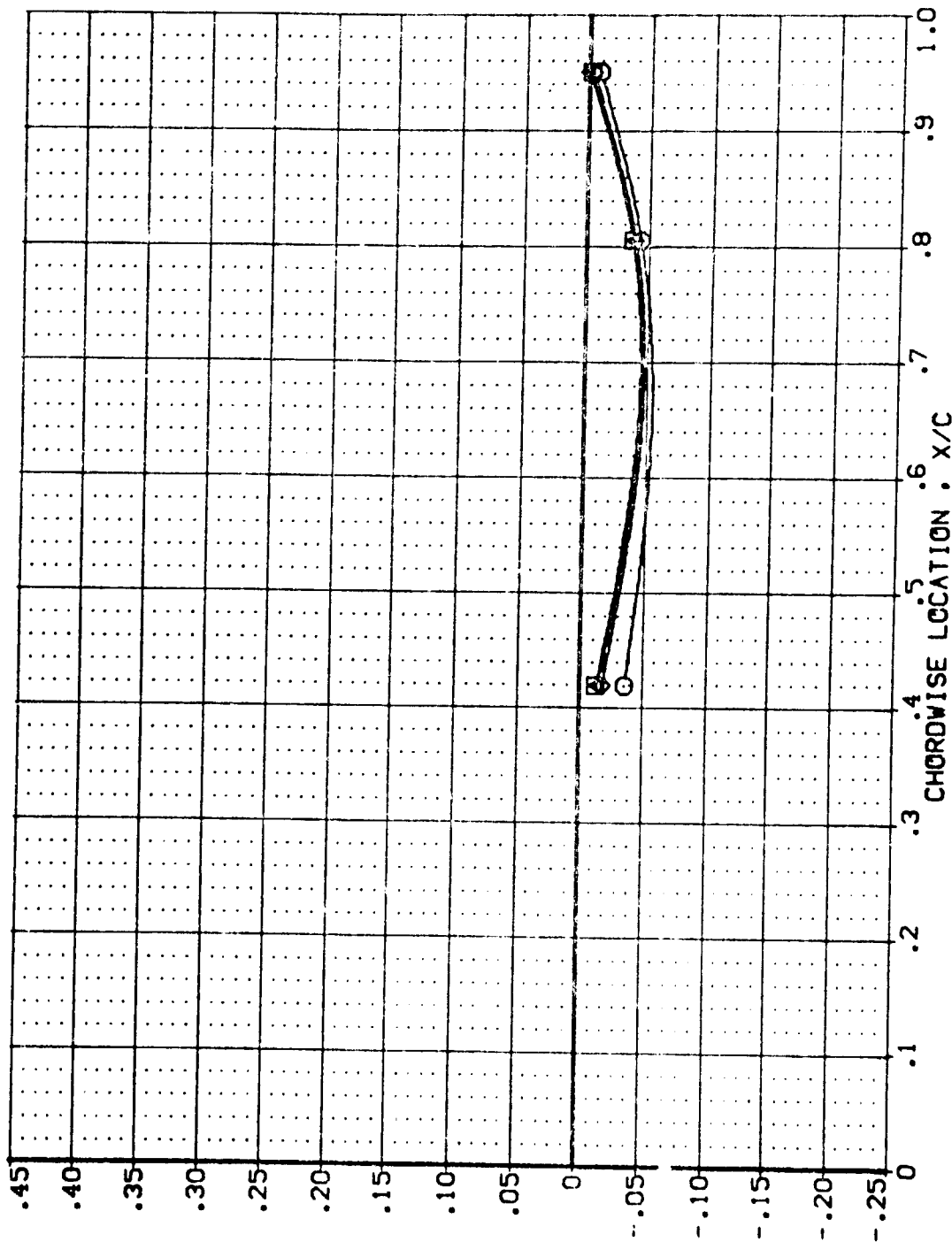
POWER
.000
1.000
1.000
1.000

CFR
23.860
23.860
23.860

SWPR
.826
.826
.826

GIMBAL
1.000
4.000
1.000
3.000

PRESSURE COEFFICIENT, CP

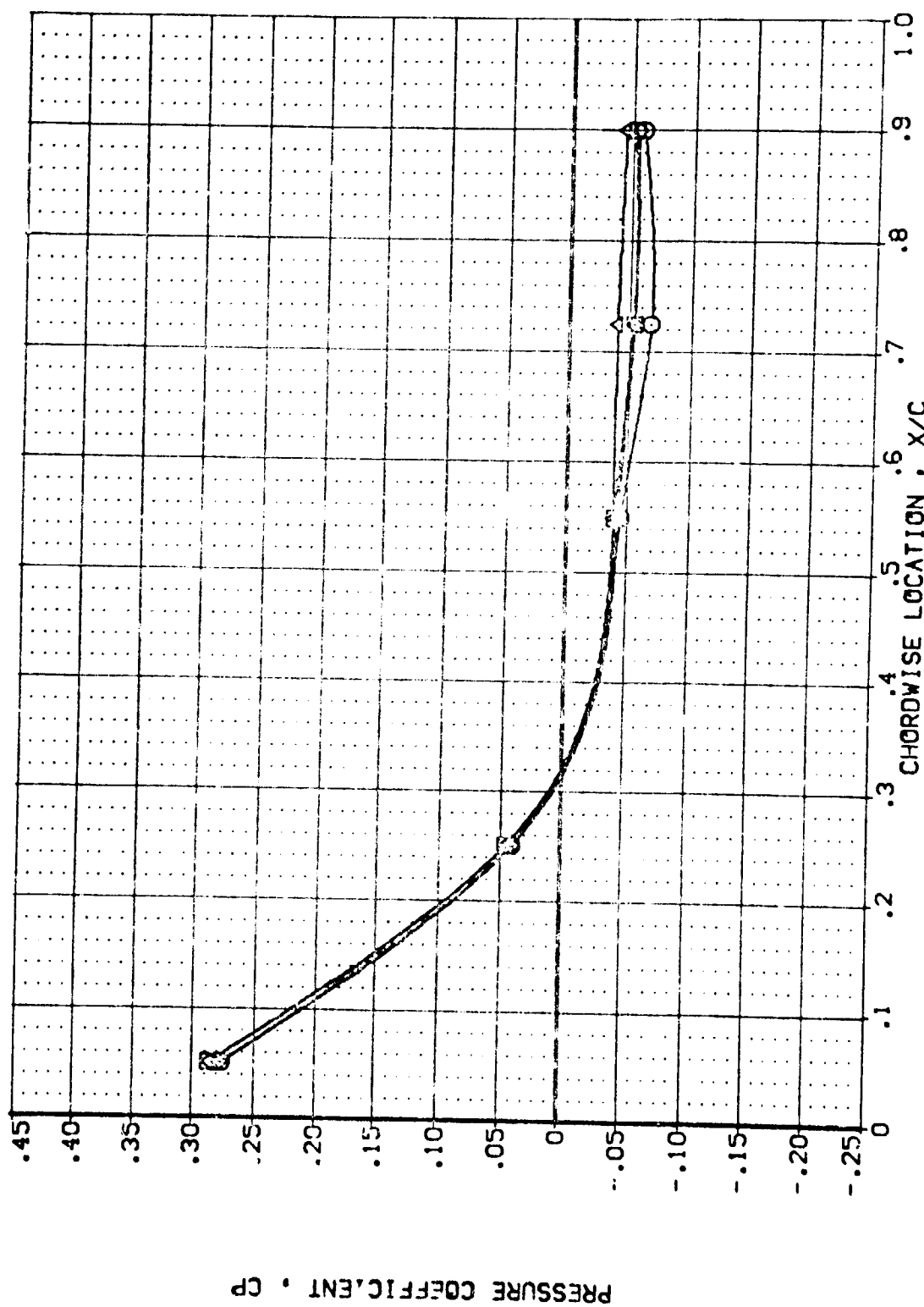


PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .427

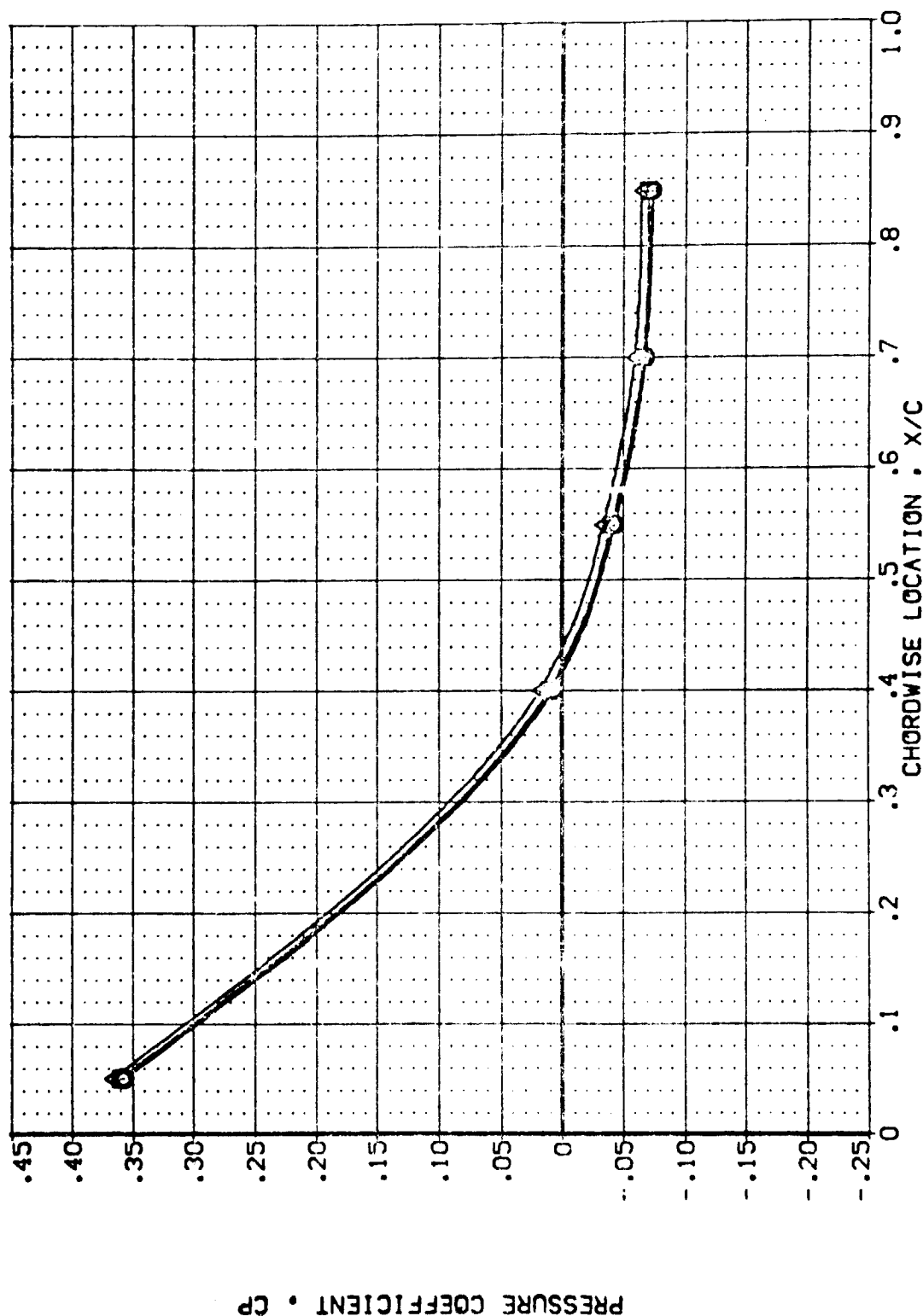
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2046)	AVES 87-710	IA12C 01	TI SI	UPPER WING PRESSURE	POWER	OPR	SPR	GIMBAL
(UB2107)	AVES 87-710	IA12C 01	TI SI	UPPER WING PRESSURE	.000	23.860	.826	1.000
(UB2050)	AVES 87-710	IA12C 01	TI SI	UPPER WING PRESSURE	1.000	23.860	.826	4.000
(UB2082)	AVES 87-710	IA12C 01	TI SI	UPPER WING PRESSURE	1.000	23.860	.826	1.000
					1.000	23.860	.826	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -- WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .534

[illegible]

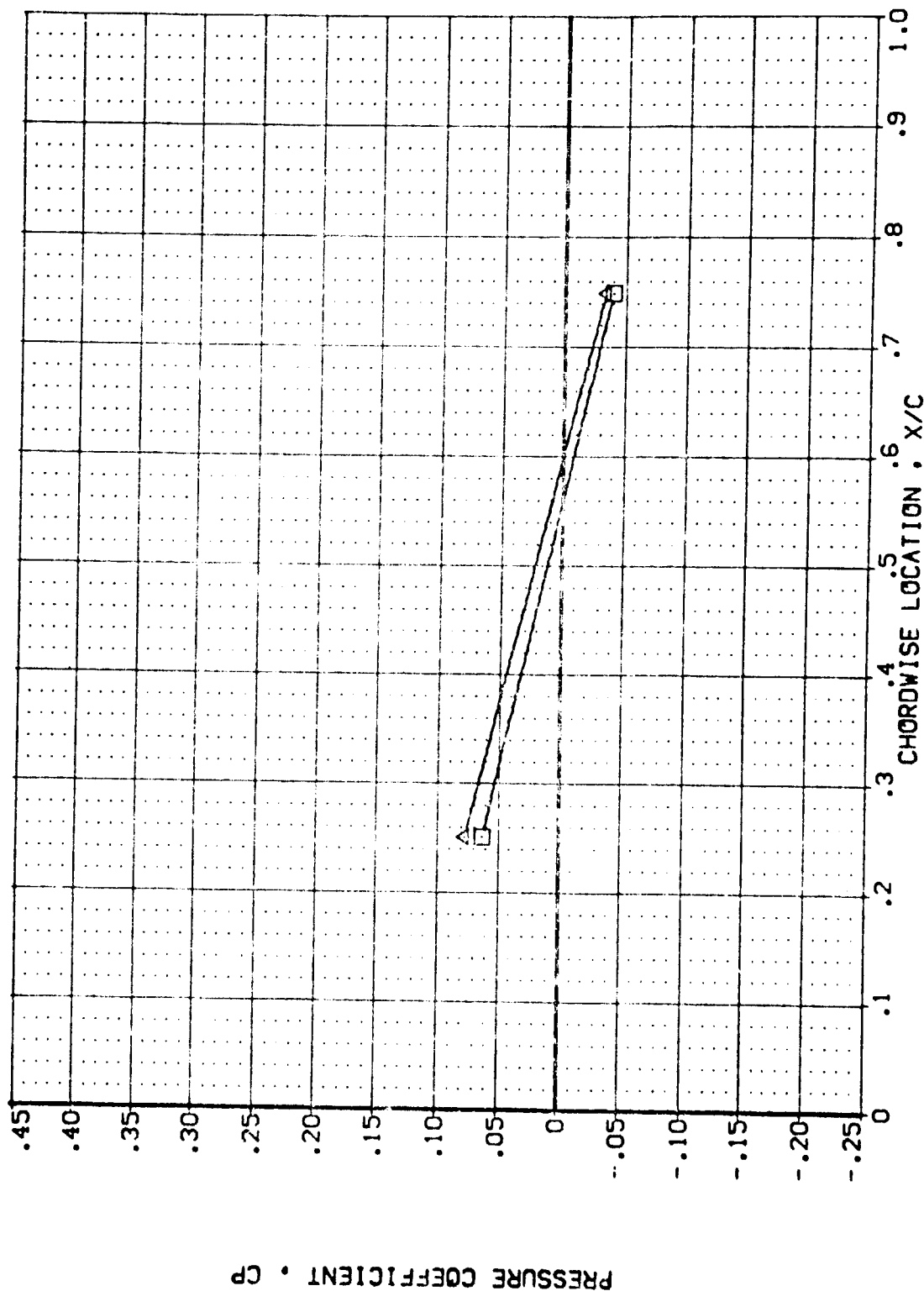
PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH	=	3.500	ALPHA	=	-8.000	Y/B	=	.673
------	---	-------	-------	---	--------	-----	---	------

PAGE 328

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZD46)	AVES 87-710	AI2C 01	TI S1	UPPER WING PRESSURE	POWER	DPR	SPRFR	GIMBAL
(LBZ107)	AVES 87-710	AI2C 01	TI S1	UPPER WING PRESSURE	.000	23.860	.826	1.000
(LBZD50)	AVES 87-710	AI2C 01	TI S1	UPPER WING PRESSURE	1.000	23.860	.826	4.000
(LBZD82)	AVES 87-710	AI2C 01	TI S1	UPPER WING PRESSURE	1.000	23.860	.826	1.000
								3.000



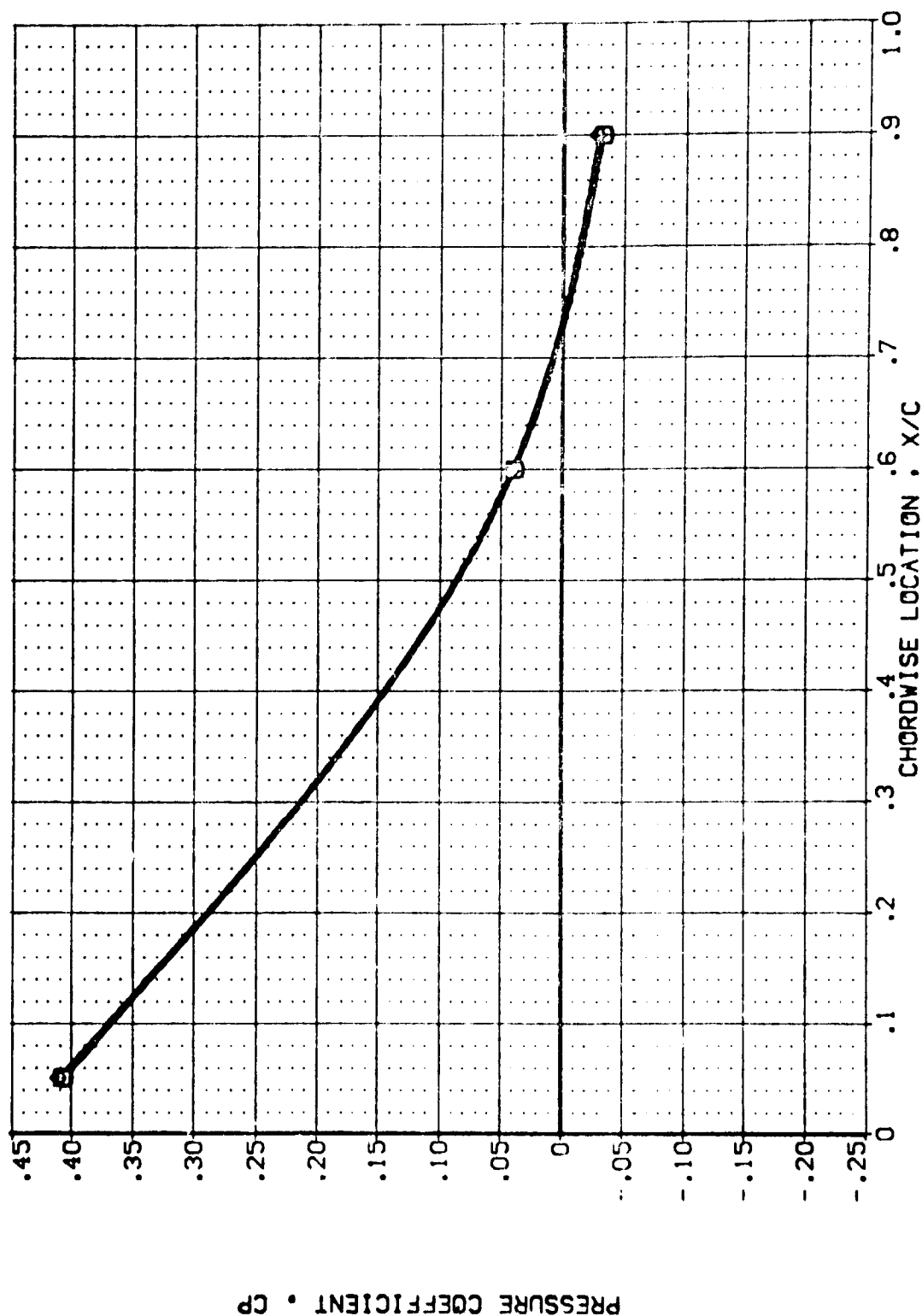
PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP
MACH = 3.500 ALPHA = -8.000 Y/B = .780
PAGE 329

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ046)	AVES 87-710	IA12C	01	TI	SI	UPPER WING
(UBZ107)	AVES 87-710	IA12C	01	TI	SI	UPPER WING
(UBZ050)	AVES 87-710	IA12C	01	TI	SI	UPPER WING
(UBZ032)	AVES 87-710	IA12C	01	TI	SI	UPPER WING

POWER GPR SRPR GIMBAL

.000	23.860	.826	1.000
1.000	23.860	.826	4.000
1.000	23.860	.826	1.000
1.000	23.860	.826	3.000



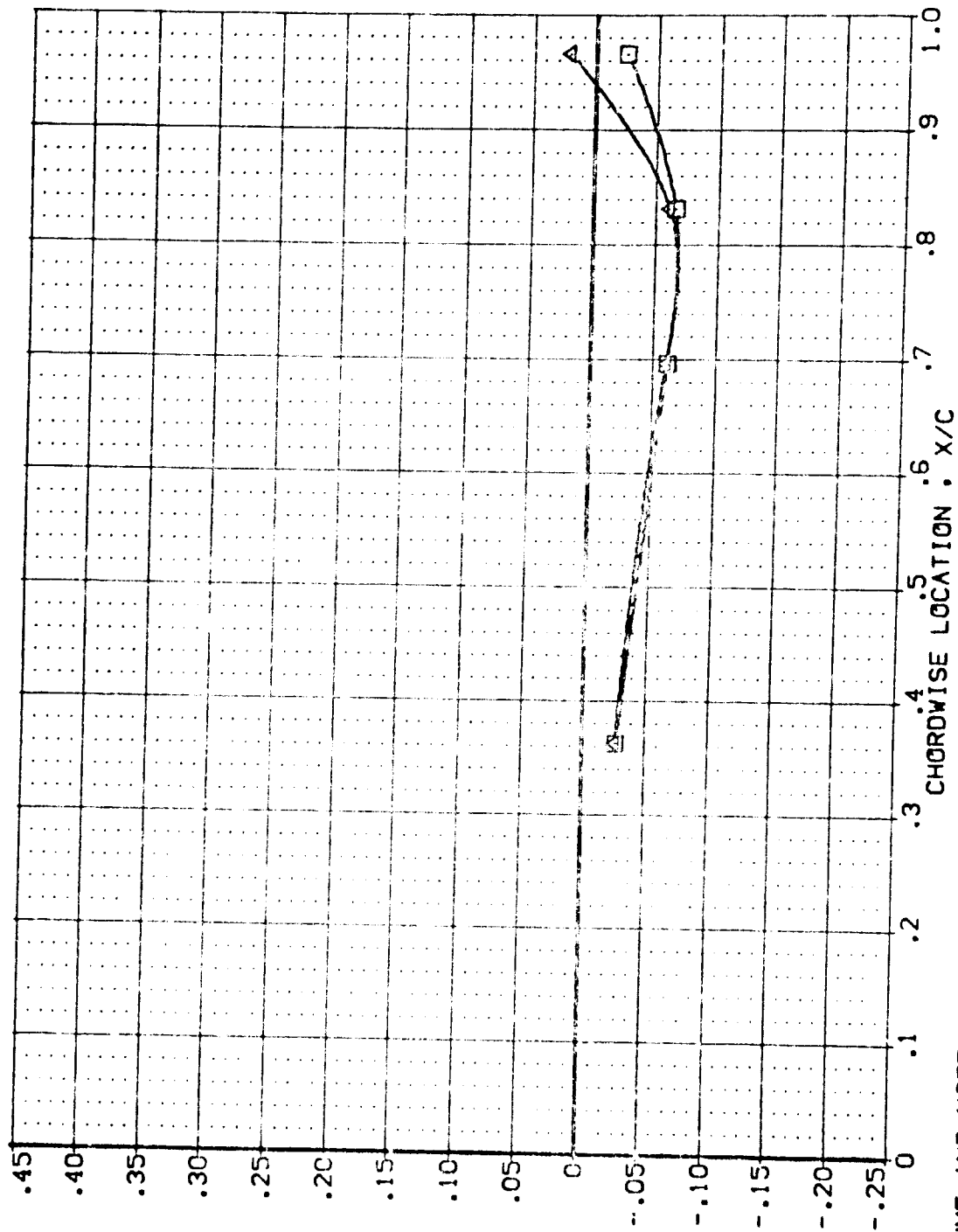
PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .887

PAGE 330

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UB2046) AHES 87-710 [A] 2C 01 T1 S1 UPPER WING PRESSURE
 (UB2107) AHES 87-710 [A] 2C 01 T1 S1 UPPER WING PRESSURE
 (UB2050) AHES 87-710 [A] 2C 01 T1 S1 UPPER WING PRESSURE
 (UB2082) AHES 87-710 [A] 2C 01 T1 S1 UPPER WING PRESSURE

POWER CDR SDRR GIMBAL
 .000 23.860 1.000
 1.000 23.860 .826
 1.000 23.860 .826

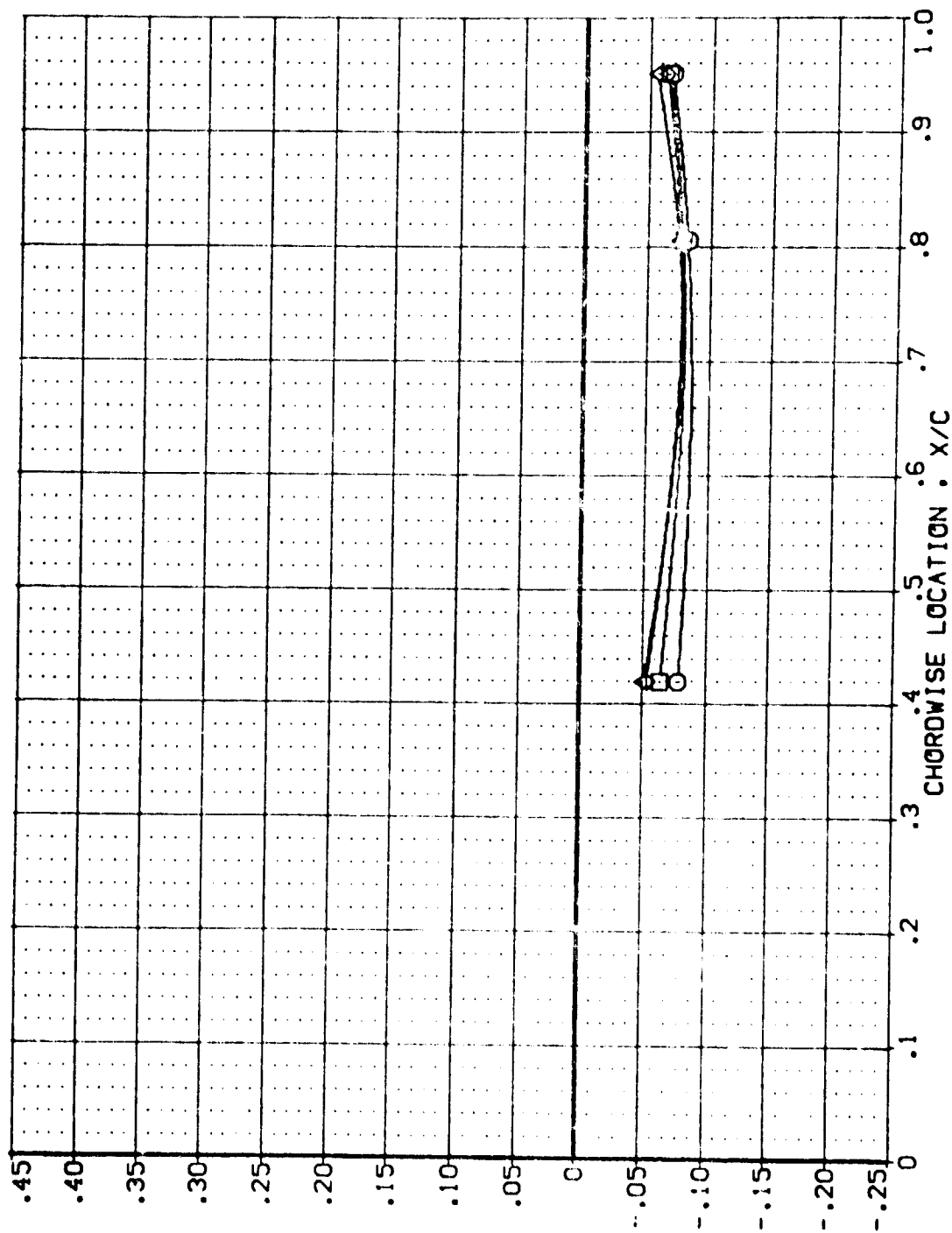


PRESSURE COEFFICIENT, CP

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP
 MACH = 3.500 ALPHA = .000 Y/B = .299
 PAGE 331

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZ046) ASES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ107) ASES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ050) ASES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ052) ASES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER GPR SGRPR GIMBAL
 .000 23.860 .826 1.000
 1.000 23.860 .826 4.000
 1.000 23.860 .826 1.000
 1.000 23.860 .826 3.000



PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

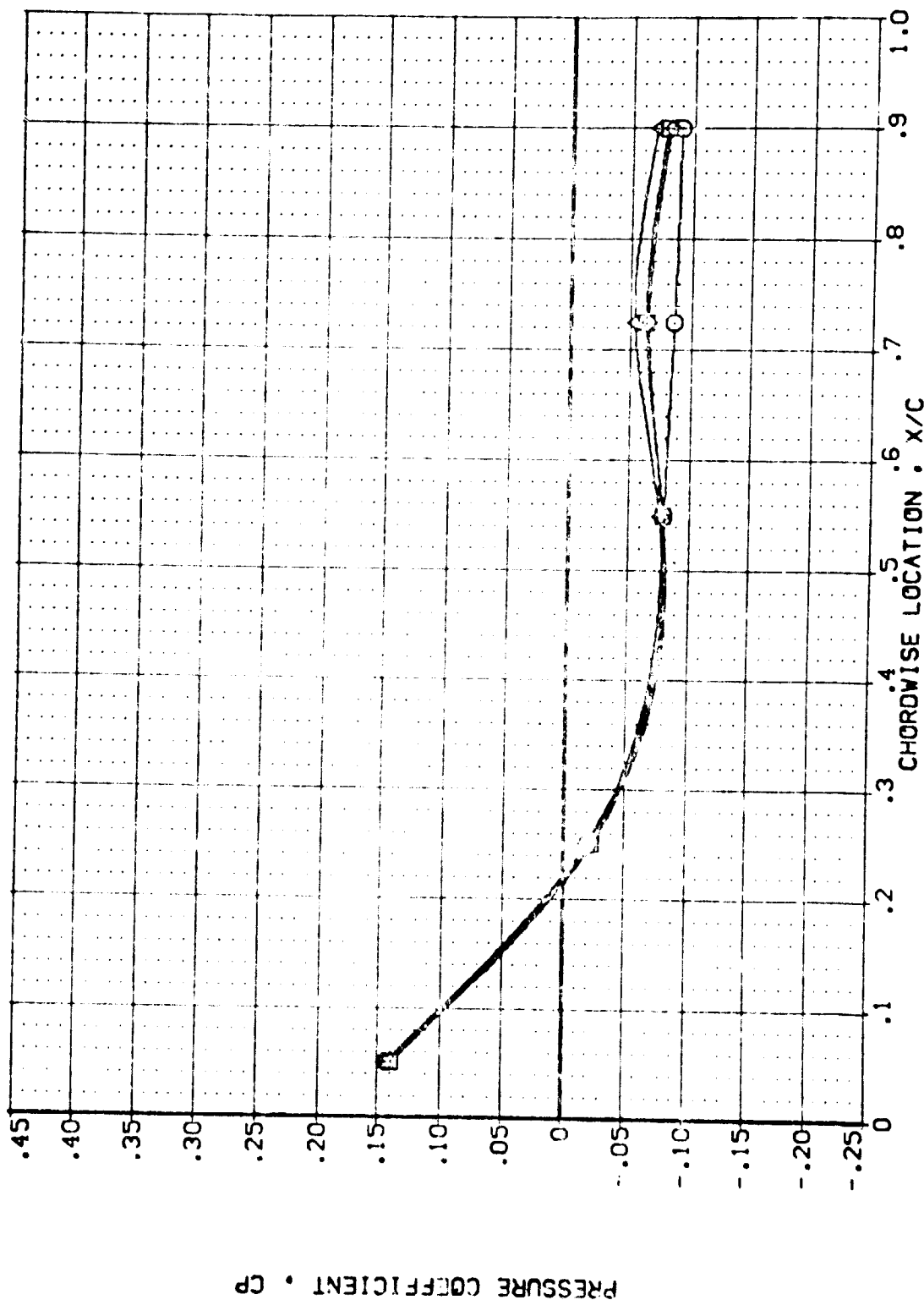
PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .427

PAGE 332

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2045)	AMES 87-710	AI2C 01	T1	S1	UPPER WING PRESSURE	POWER	OPR	SP-PR	GIMBAL
(UB2107)	AMES 87-710	AI2C 01	T1	S1	UPPER WING PRESSURE	.000	23.950	.826	1.000
(UB2050)	AMES 87-710	AI2C 01	T1	S1	UPPER WING PRESSURE	1.000	23.660	.826	4.000
(UB2052)	AMES 87-710	AI2C 01	T1	S1	UPPER WING PRESSURE	1.000	23.660	.826	1.000
						1.000	23.660	.826	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL

(UBZD46)
(UBZ107)
(UBZ050)
(UBZ052)

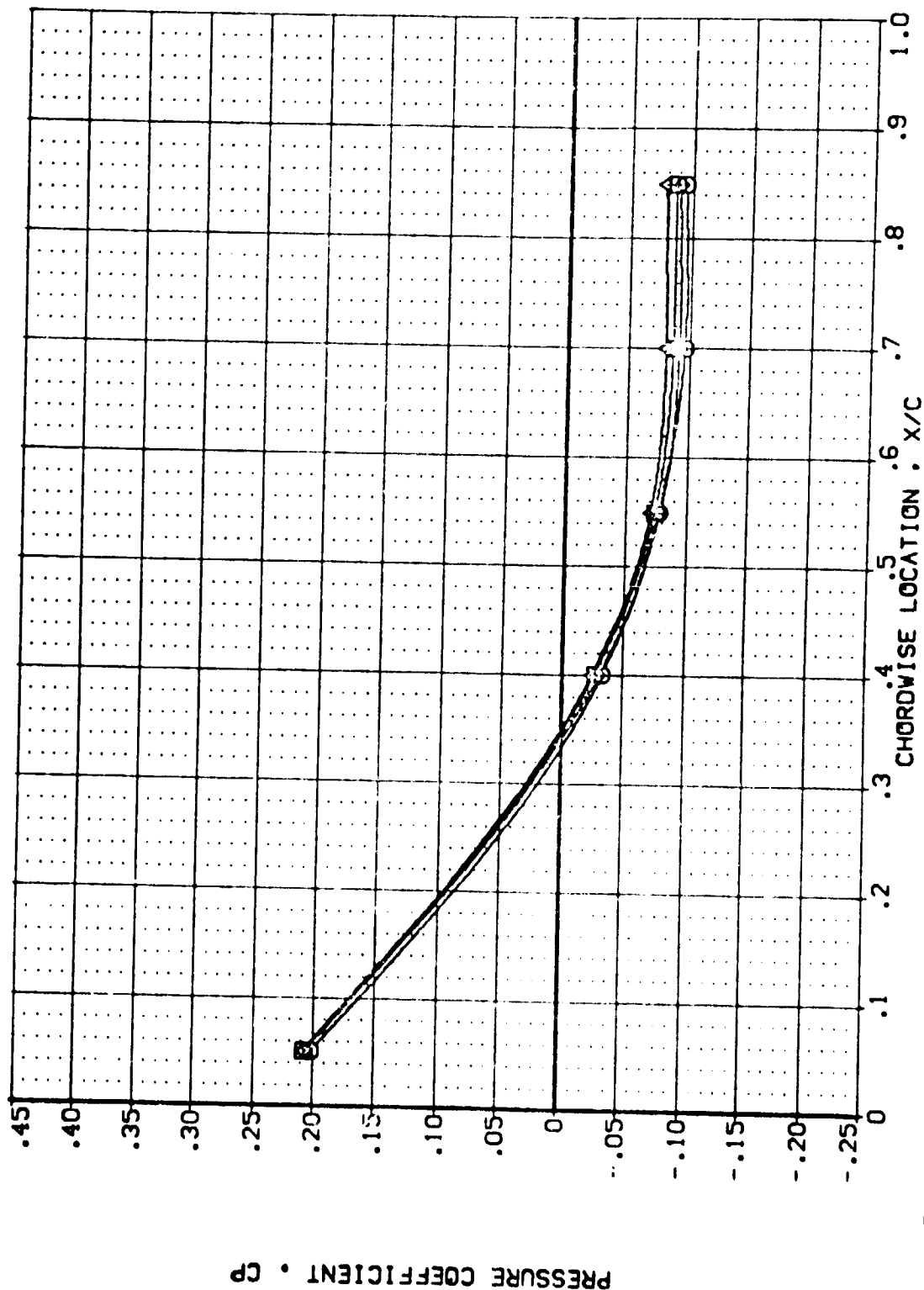
CONFIGURATION DESCRIPTION

AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE

POWER .000 23.860
1.000 23.860
1.000 23.860
1.000 23.860

SWPR .826 .826

GIMBAL 1.000 4.000 1.000 3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB7046)
(UB7107)
(UB7050)
(UB7032)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

AI12C 01 T1 S1
AI12C 01 T1 S1
AI12C 01 T1 S1
AI12C 01 T1 S1

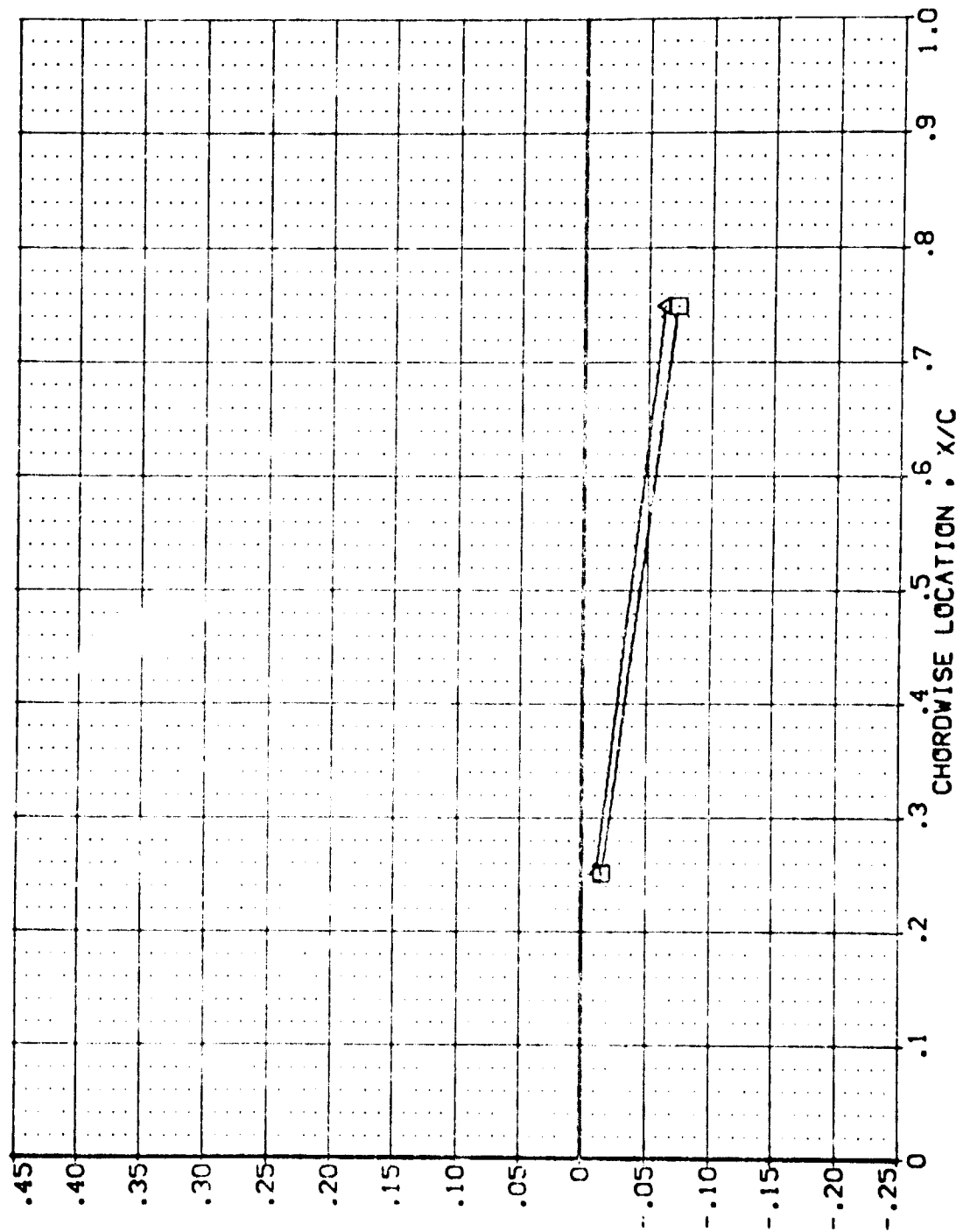
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER
1.000
1.000
1.000
1.000

QPR
23.860
23.860
23.860
23.860

SPRPR
.826
.826
.826
.826

GIMBAL
1.000
4.000
1.000
3.000



PRESSURE COEFFICIENT, CP

CHORDWISE LOCATION, X/C

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .780

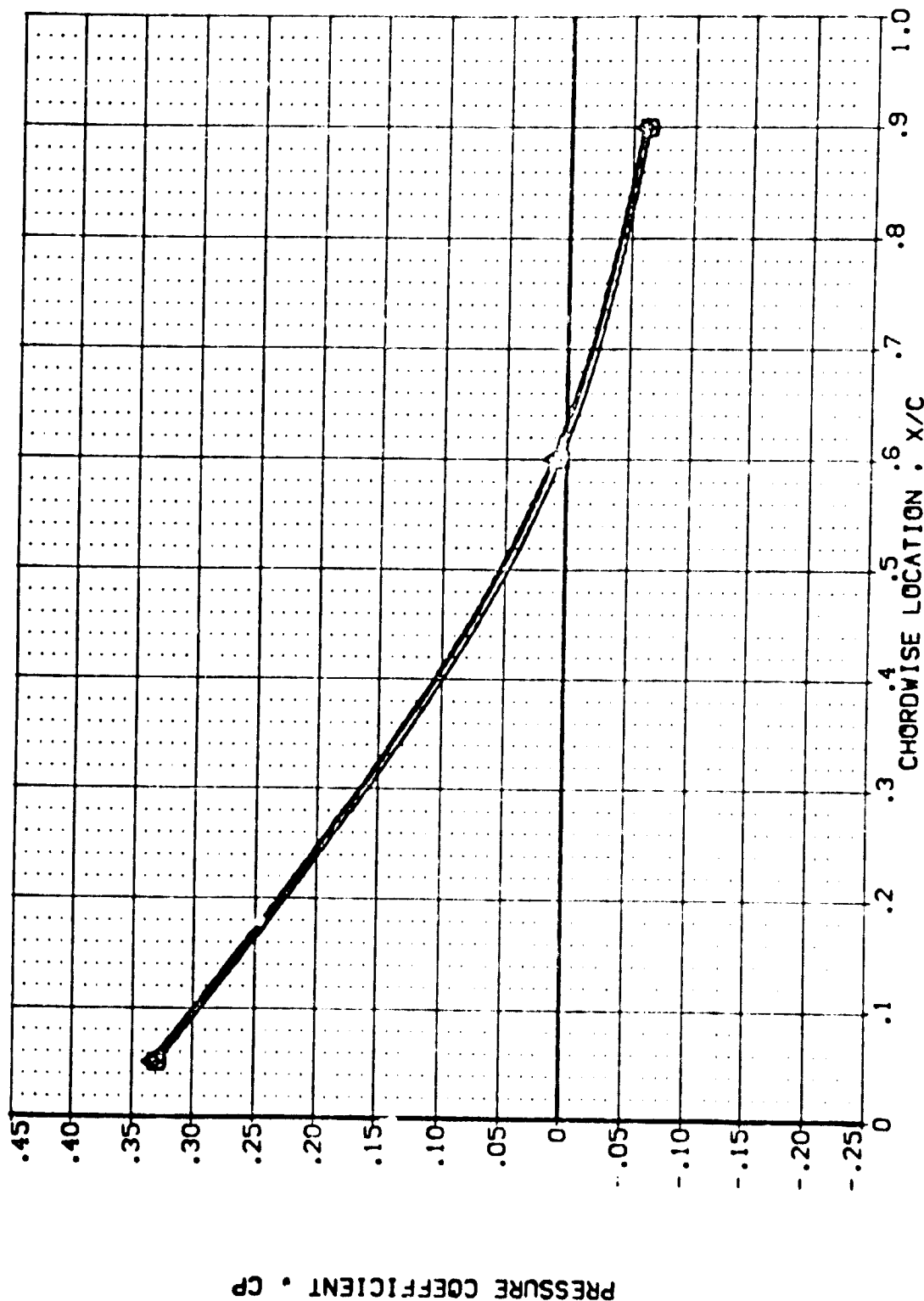
DATA SET SYMBOL

(UB2046)
(UB2107)
(UB2050)
(UB2082)

CONFIGURATION DESCRIPTION

AMES 87-710 [A]12C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 [A]12C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 [A]12C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 [A]12C 01 T1 S1 UPPER WING PRESSURE

POWER 0.000 23.660
GIMBAL 1.000 4.000
SPPR .826 .826
OPR 23.660 23.660



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

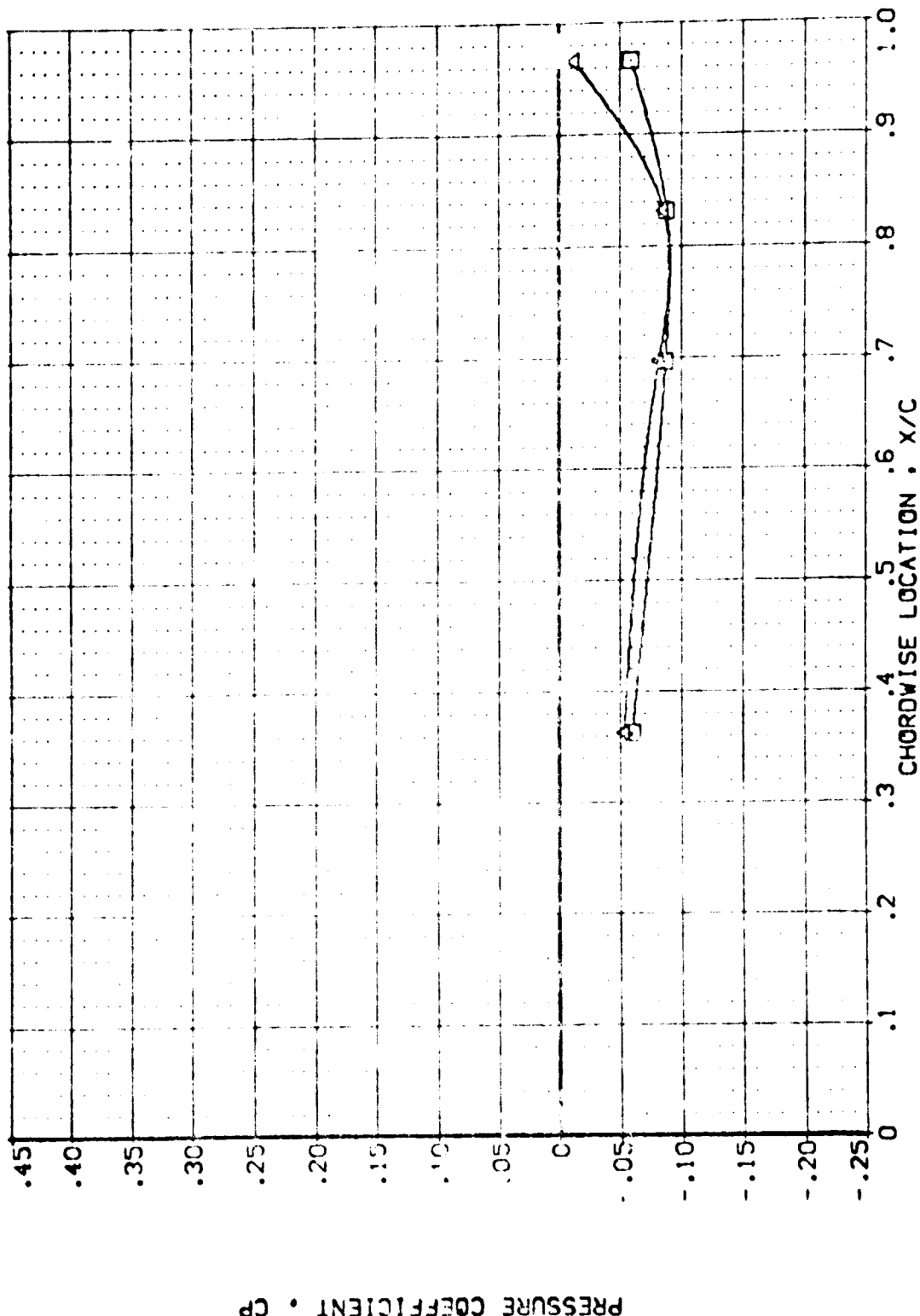
(UB10046)
(UB1107)
(UB1050)
(UB2052)

AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

[A12C 01 T1 S1]
[A12C 01 T1 S1]
[A12C 01 T1 S1]
[A12C 01 T1 S1]

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER C/P S/P/R GIMBAL
.000 23.950 1.000 1.000
1.000 23.950 .826 4.000
1.000 23.950 .826 1.000
1.000 23.950 .826 3.000



PRESSURE COEFFICIENT • CP

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

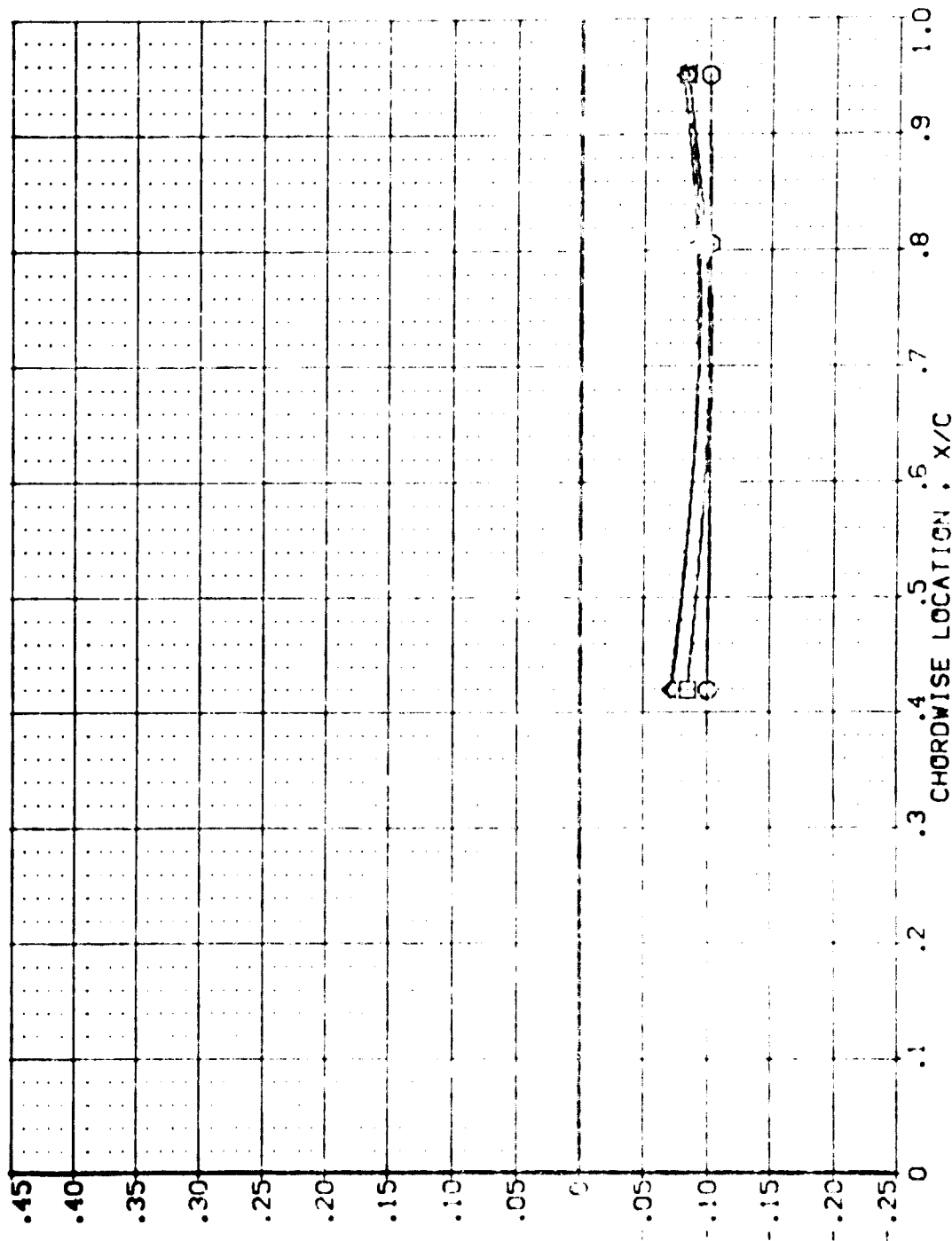
MACH = 3.500 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZ046) ASES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ107) ASES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ050) ASES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ082) ASES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER 0.000 23.860 1.000 1.000
 0.000 23.860 1.000 1.000
 0.000 23.860 1.000 1.000
 0.000 23.860 1.000 1.000

SR-PR 0.826 0.826 0.826 0.826

GIMBAL 1.000 4.000 1.000 3.000



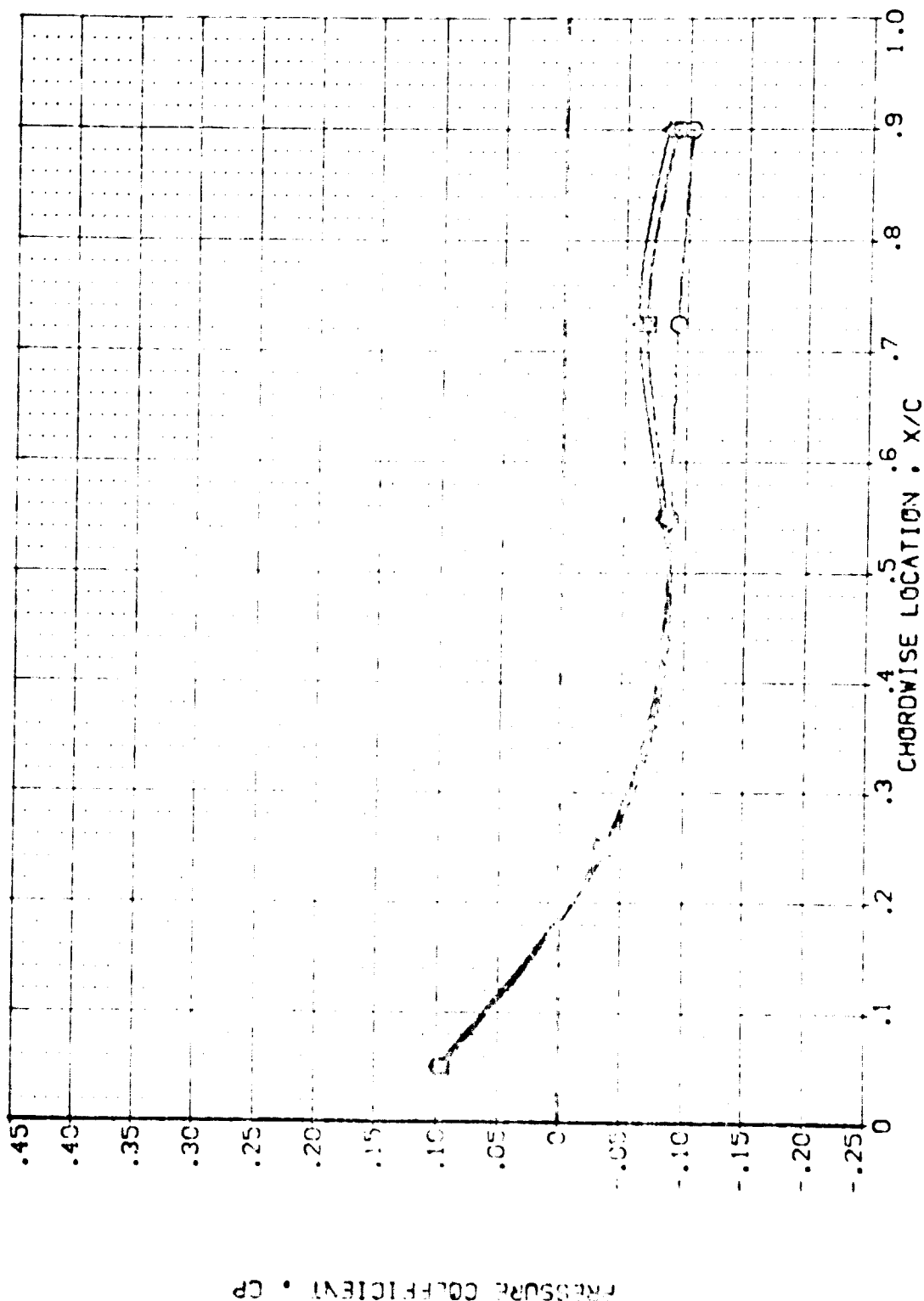
PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .427

PAGE 338

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UR2046)	AMES 87-710	[A12C O]	T1 S1	UPPER WING PRESSURE	POWER	CPR	SNRPR	GIMBAL
(UR2047)	AMES 87-710	[A12C O]	T1 S1	UPPER WING PRESSURE	.000	23.860	.826	1.000
(UR2050)	AMES 87-710	[A12C O]	T1 S1	UPPER WING PRESSURE	1.000	23.860	.826	4.000
(UR2052)	AMES 87-710	[A12C O]	T1 S1	UPPER WING PRESSURE	1.000	23.860	.826	1.000
					1.000	23.860	.826	3.000

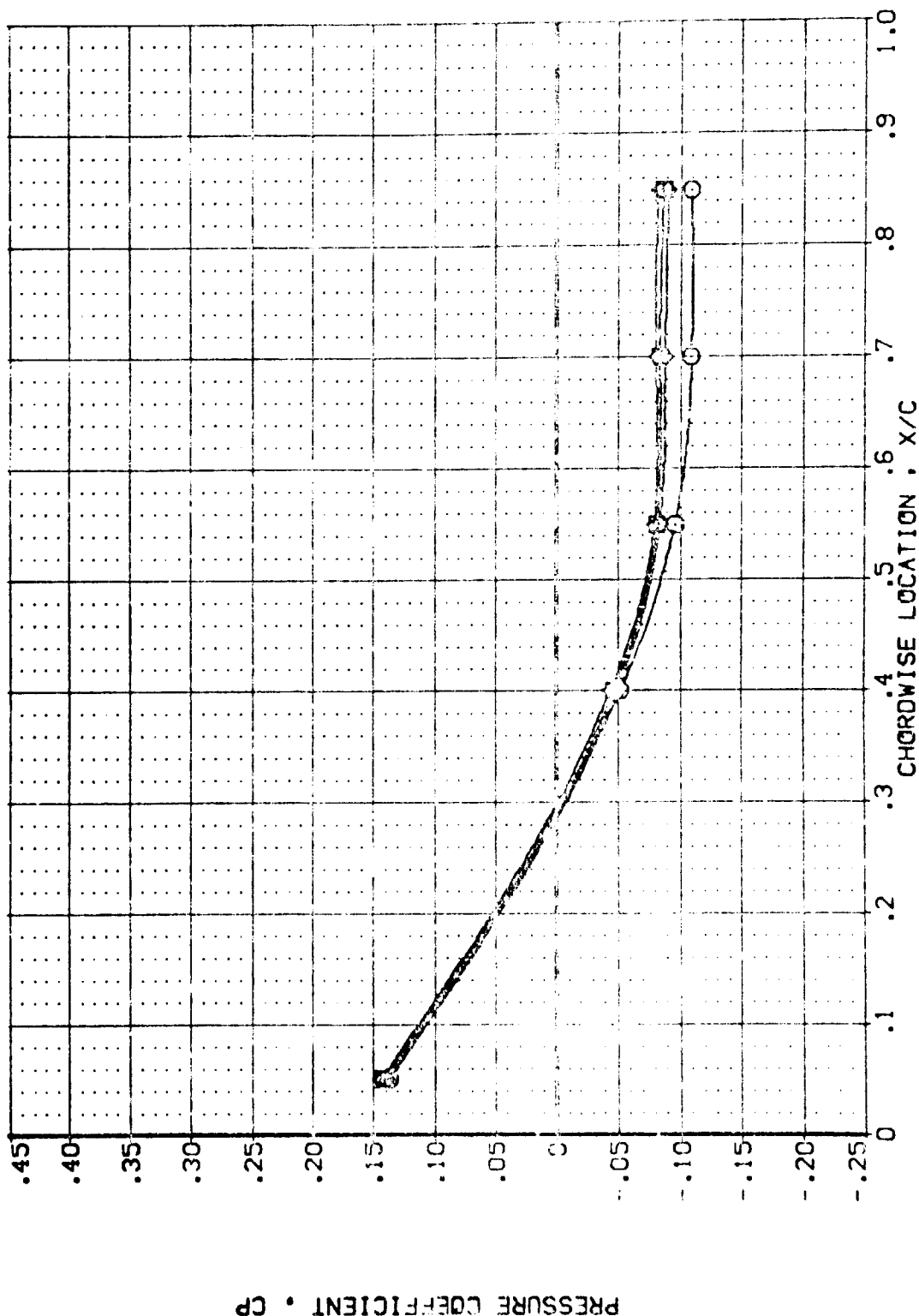


PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UB2046) AVE8 87-710 [A1ZC 01 T1 S1] UPPER WING PRESSURE
 (UB2107) AVE8 87-710 [A1ZC 01 T1 S1] UPPER WING PRESSURE
 (UB2250) AVE8 87-710 [A1ZC 01 T1 S1] UPPER WING PRESSURE
 (UB2052) AVE8 87-710 [A1ZC 01 T1 S1] UPPER WING PRESSURE

POWER C/FR S/FPR GIMBAL
 1.000 23.860 .876 1.000
 1.000 23.860 .876 4.000
 1.000 23.860 .876 1.000
 1.000 23.860 .876 3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .673

PAGE 340

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2046)
(UB2107)
(UB2050)
(UB2052)

AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

IA12C OI TI SI
IA12C OI TI SI
IA12C OI TI SI
IA12C OI TI SI

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER

.000
1.000
1.000
1.000

QPR

23.860
23.860
23.860
23.860

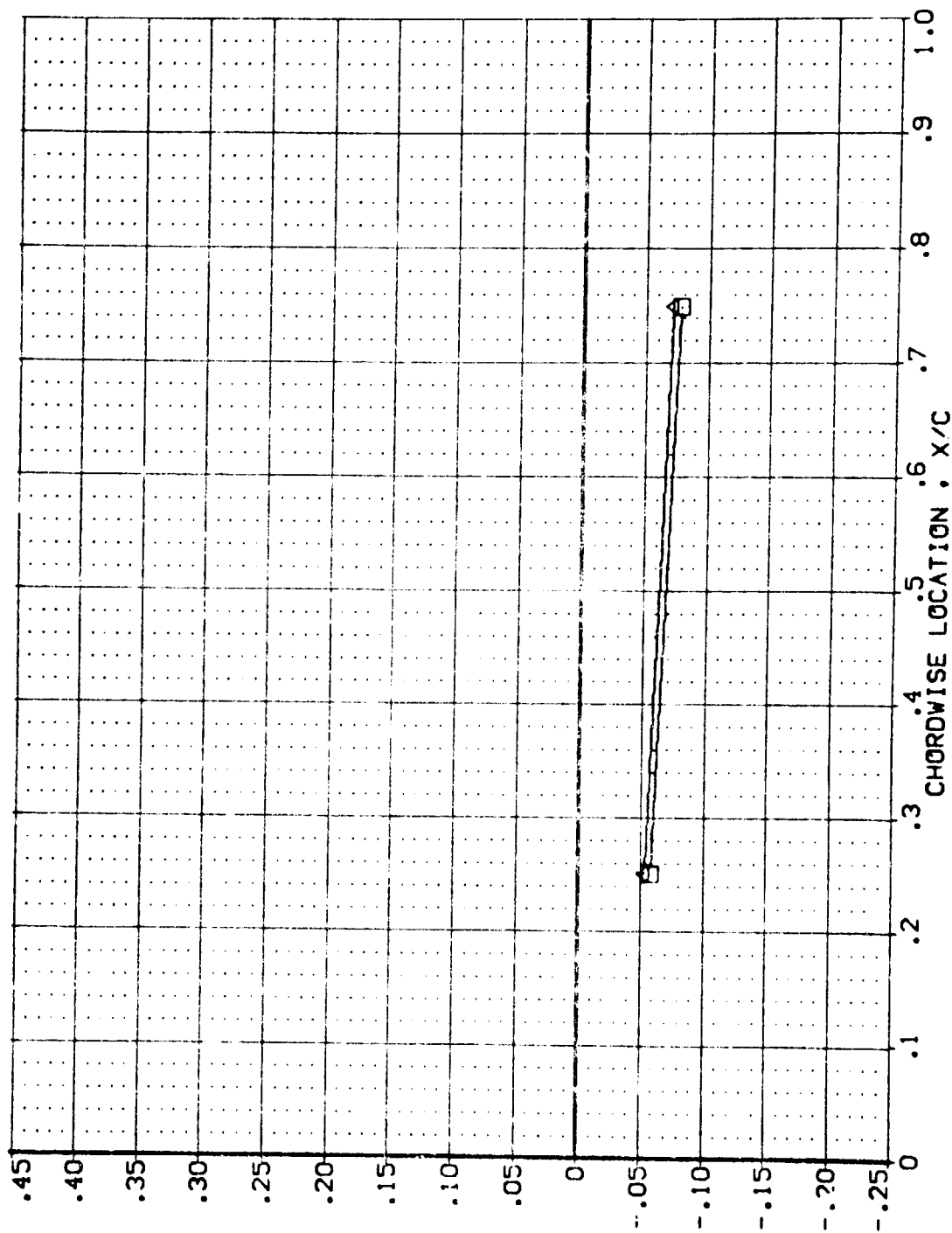
STPR

.826
.826
.826
.826

GIMBAL

1.000
4.000
1.000
3.000

PRESSURE COEFFICIENT, CP



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL

(UBZ046)
(UBZ107)
(UBZ050)
(UBZ052)

CONFIGURATION DESCRIPTION

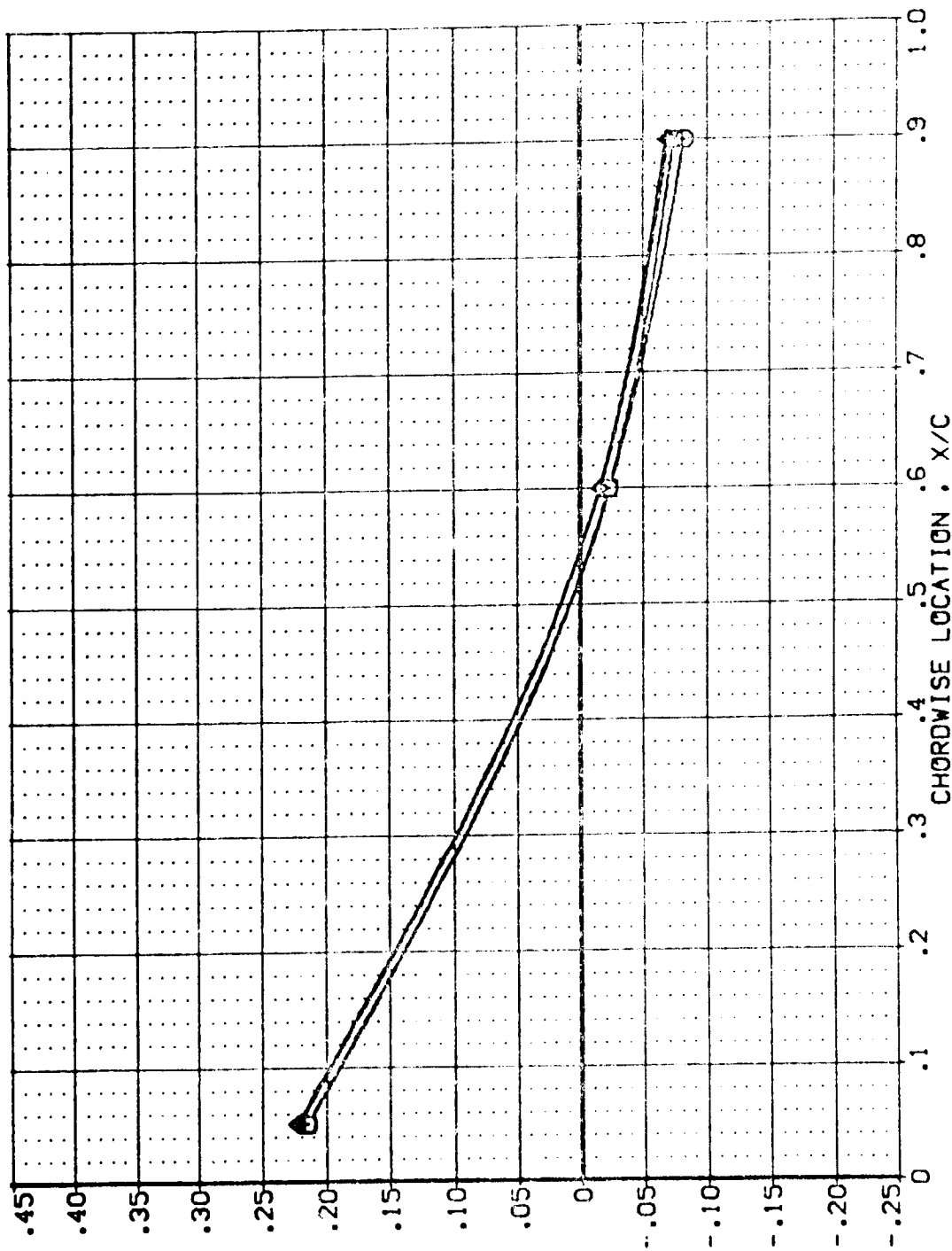
AMES 87-710 IAI2C OI TI SI UPPER WING PRESSURE
AMES 87-710 IAI2C OI TI SI UPPER WING PRESSURE
AMES 87-710 IAI2C OI TI SI UPPER WING PRESSURE
AMES 87-710 IAI2C OI TI SI UPPER WING PRESSURE

POWER 1.000
1.000 23.860
1.000 23.860
1.000 23.860

OPR 1.000
1.000 23.860
1.000 23.860

GINBAL 1.000
4.000 1.000
3.000 1.000

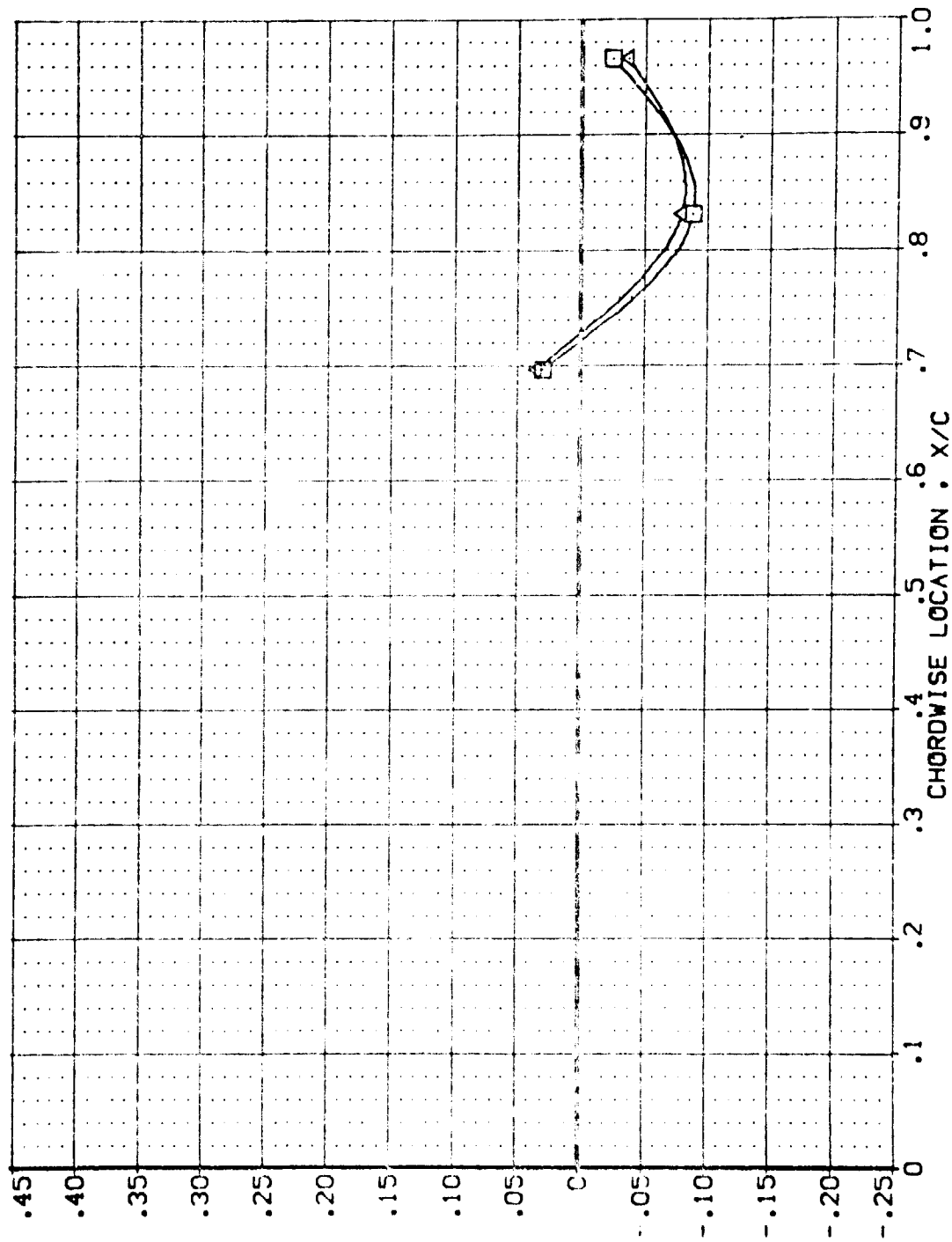
PRESSURE COEFFICIENT, CP



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CPR	SR-PR	GIMBAL
(LB2037)	AVES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LB2039)	AVES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE	1.000	31.260	.916	4.000
(LB2034)	AVES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE	1.000	31.260	.916	1.000
(LB2036)	AVES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE	1.000	31.260	.916	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

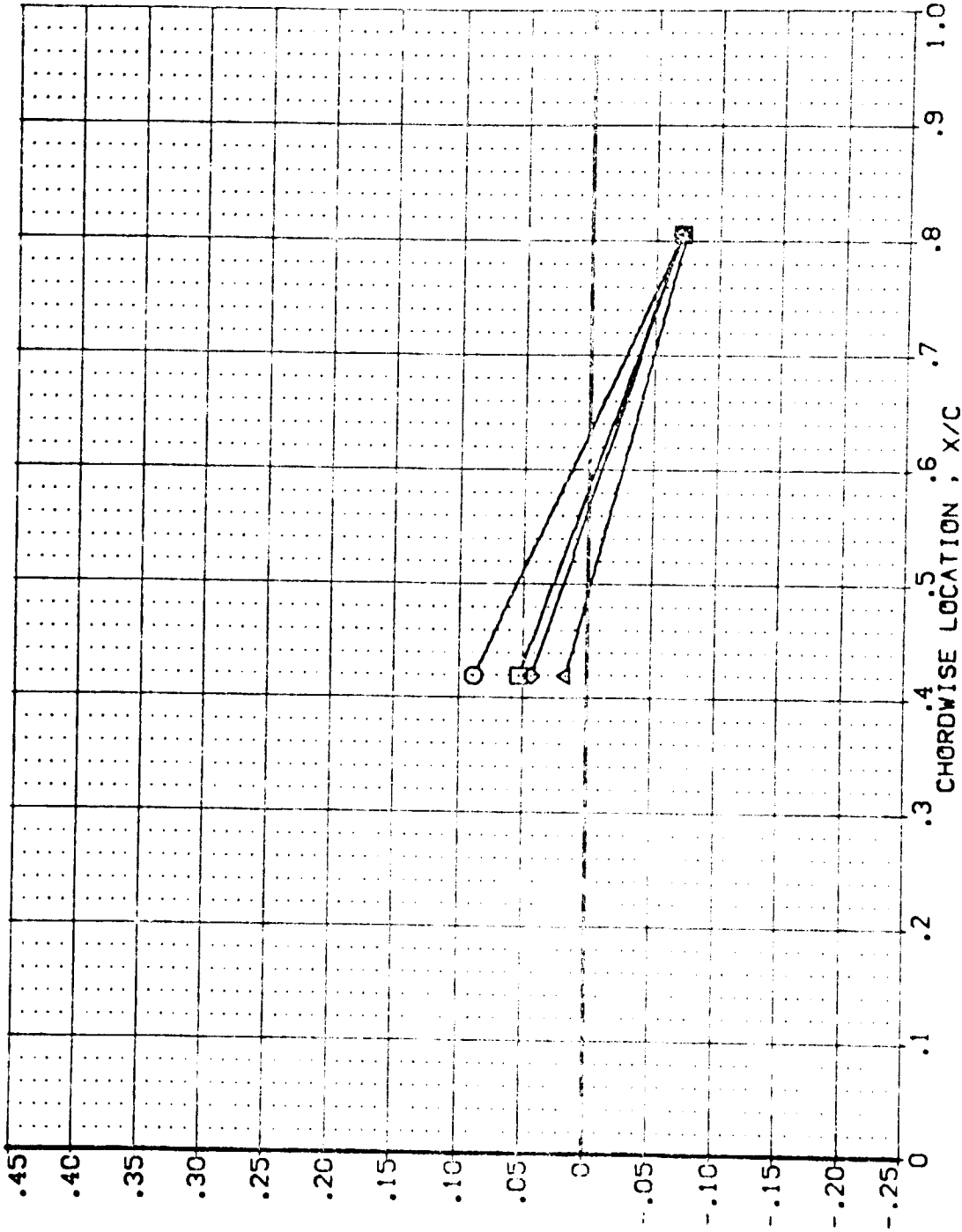
MACH = 2.500 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ037)  (LBZ039)  (LBZ034)  (LBZ036) 

AVES 87-710 [A] [I] [A] [I] [C] [O] [I] [T] [I] [S] [I] LOWER WING PRESSURE
AVES 87-710 [A] [I] [A] [I] [C] [O] [I] [T] [I] [S] [I] LOWER WING PRESSURE
AVES 87-710 [A] [I] [A] [I] [C] [O] [I] [T] [I] [S] [I] LOWER WING PRESSURE

POWER DFR SFR GIMBAL
.000 31.260 .916 1.000
1.000 31.260 .916 4.000
1.000 31.260 .916 1.000
1.000 31.260 .916 3.000



PRESSURE COEFFICIENT • CP

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

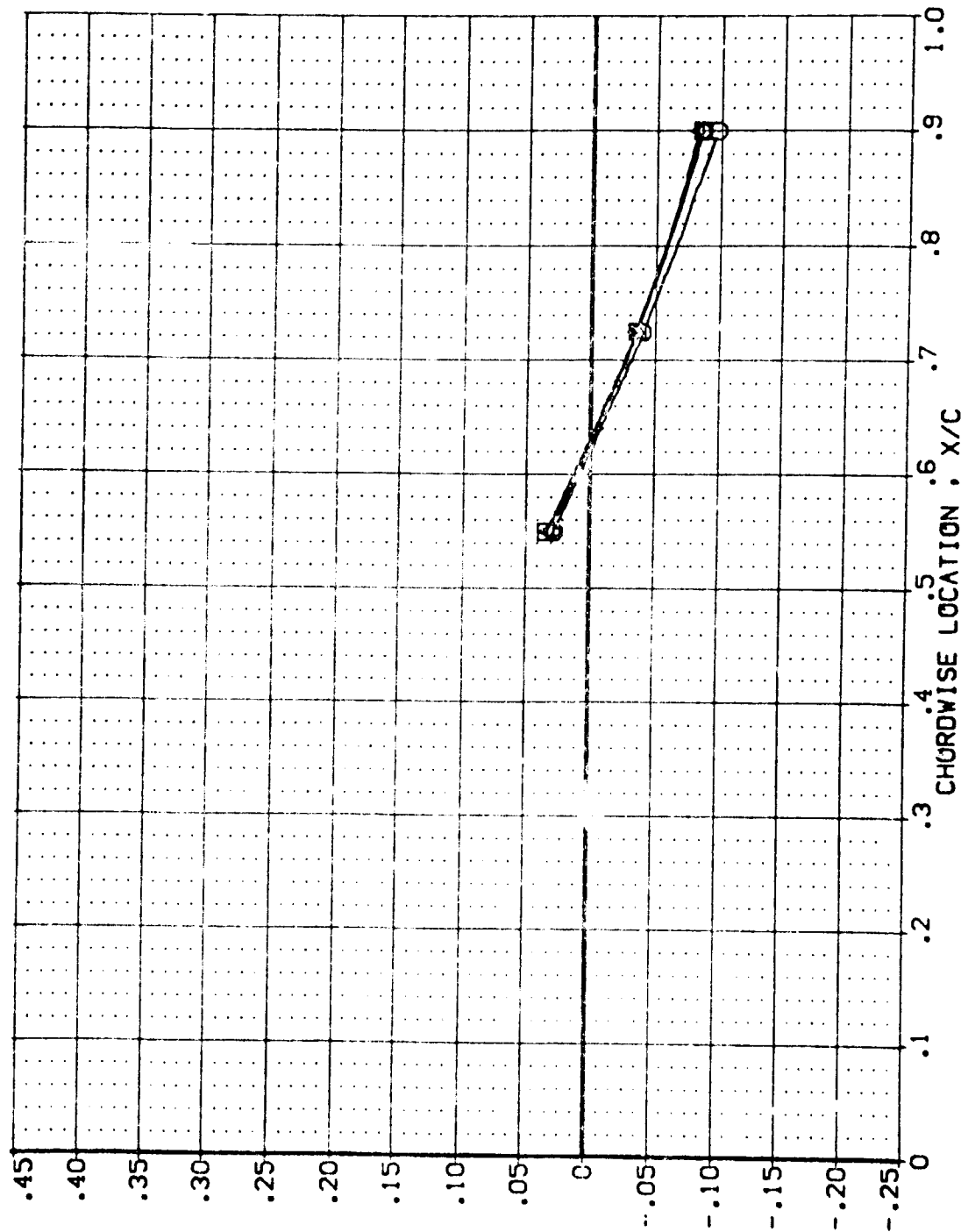
MACH = 2.500 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ037)
(LBZ038)
(LBZ039)
(LBZ040)

AMES 87-710 IAI2C OI TI SI
AMES 87-710 IAI2C OI TI SI
AMES 87-710 IAI2C OI TI SI
AMES 87-710 IAI2C OI TI SI

POWER DFR SFR GIMBAL
.000 31.260 .916 1.000
1.000 31.260 .916 4.000
1.000 31.260 .916 1.000
1.000 31.260 .916 3.000



PRESSURE COEFFICIENT • CP

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

POWER C/FR S/FR G/GAL

AMES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE
 AMES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE
 AMES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE

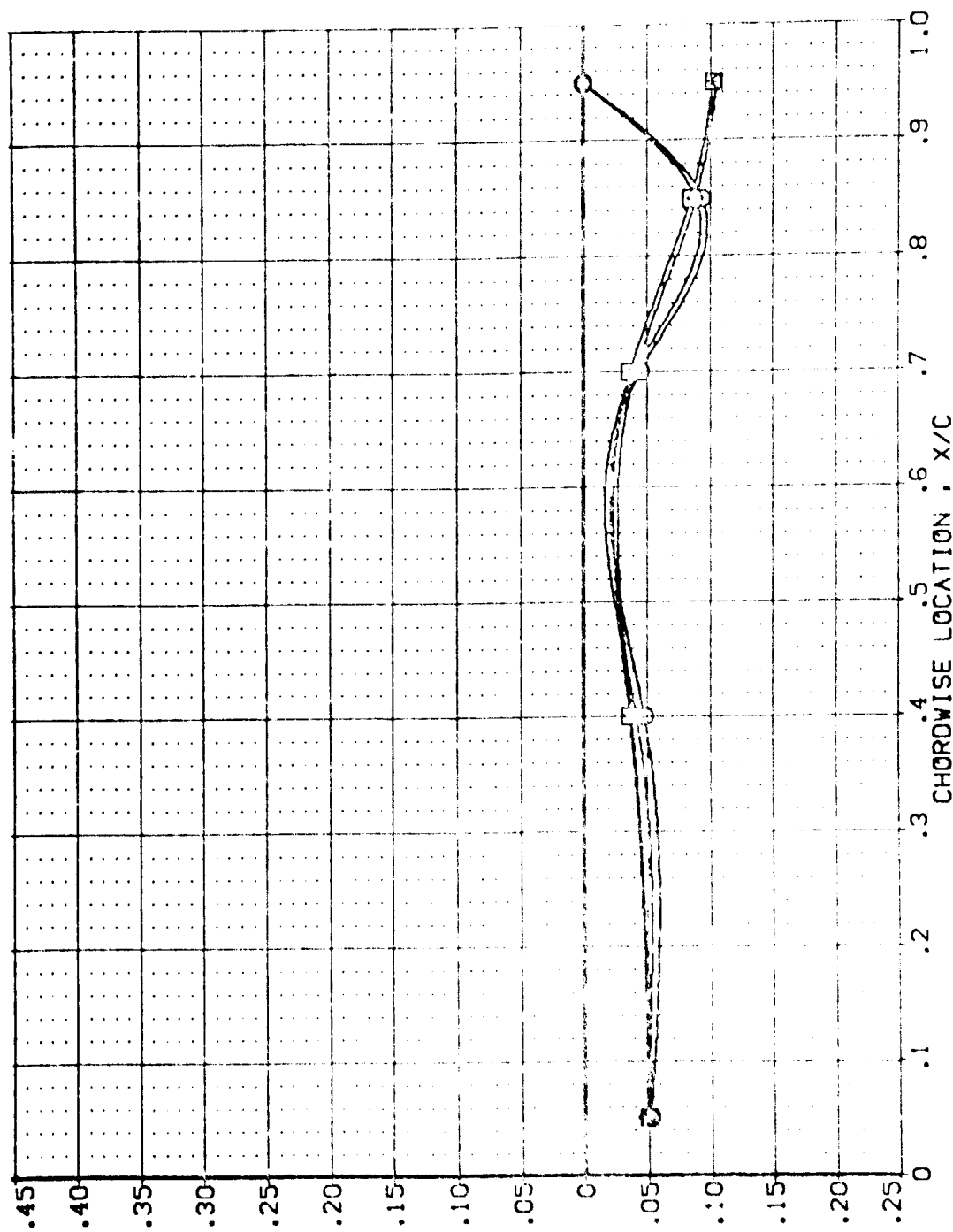
(LBZ037)
 (LBZ059)
 (LBZ034)
 (LBZ056)

1.000
 1.000
 1.000
 1.000

31.260
 31.260
 31.260

.916
 .916
 .916

1.000
 4.000
 1.000
 3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .673

PAGE 346

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB2037)
(LB2038)
(LB2039)
(LB2040)
(LB2041)

AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

POWER
.000
1.000
1.000
1.000

DPR
31.260
31.260
31.260
31.260

SRPR
.916
.916
.916
.916

GIMBAL
1.000
4.000
1.000
3.000

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

SI
SI
SI
SI

DI
DI
DI
DI

TI
TI
TI
TI

SI
SI
SI
SI

SI
SI
SI
SI

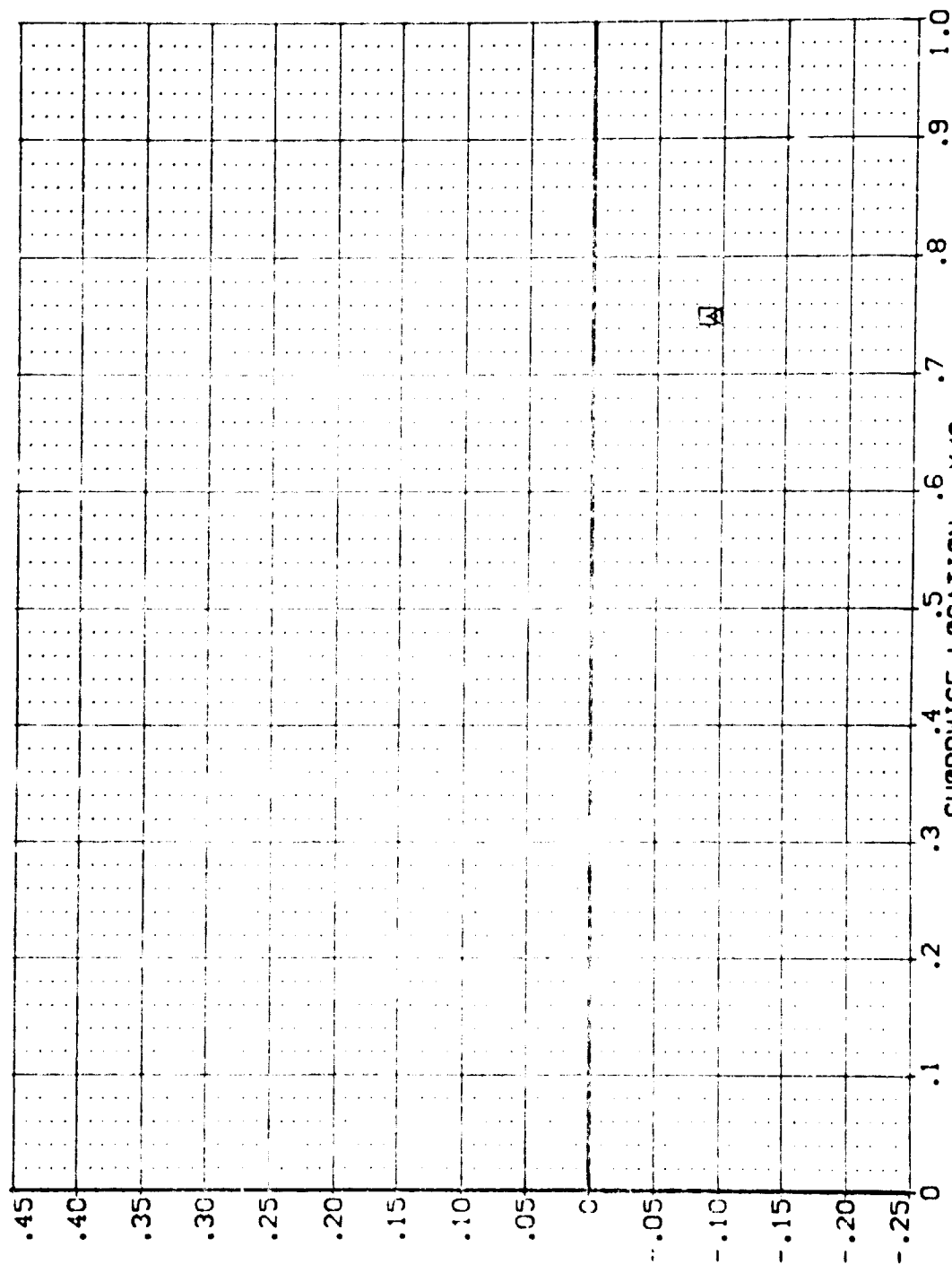
SI
SI
SI
SI

SI
SI
SI
SI

SI
SI
SI
SI

SI
SI
SI
SI

SI
SI
SI
SI



PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ007)
(LBZ008)
(LBZ009)
(LBZ010)
(LBZ011)

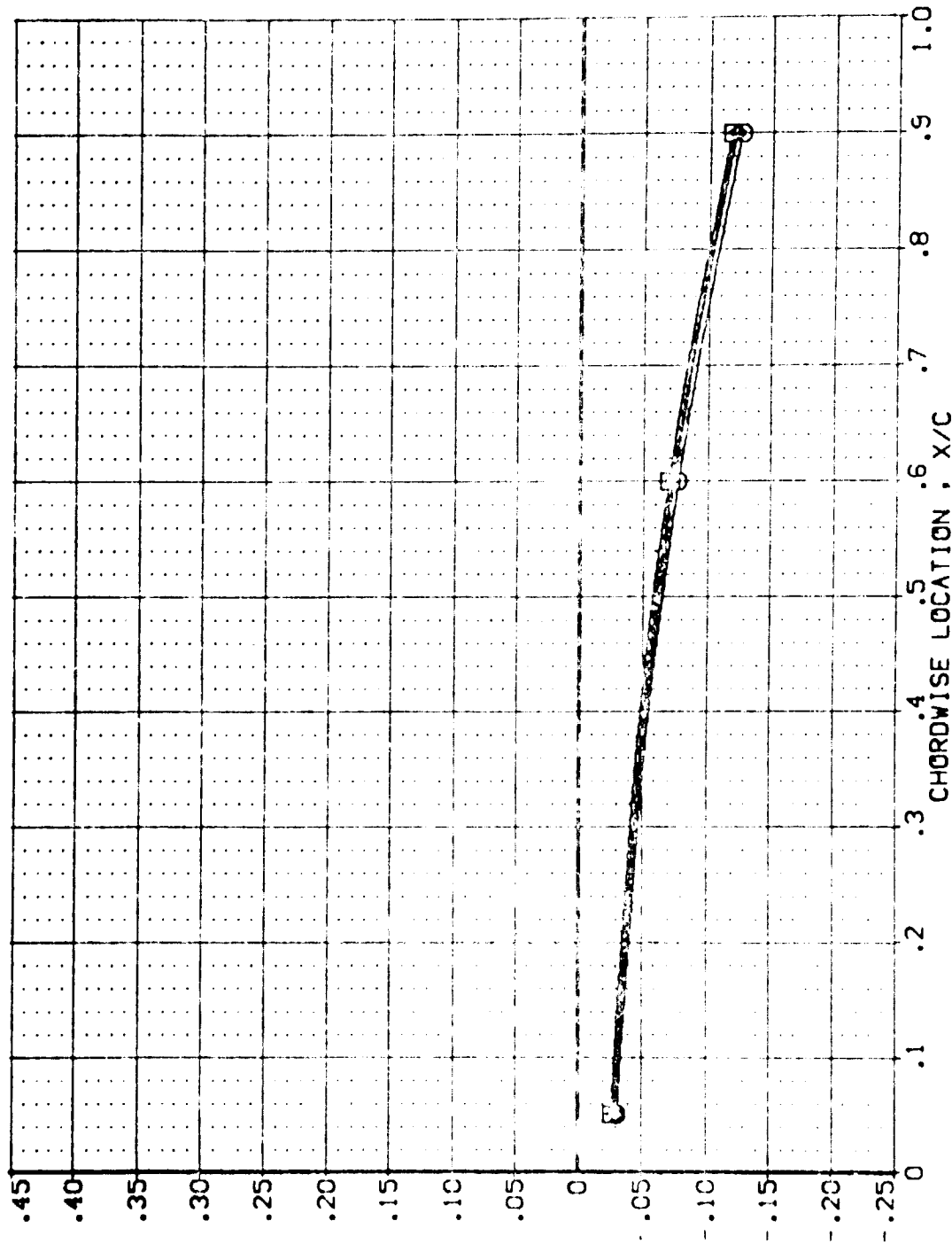
AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

POWER
.000
1.000
1.000
1.000

Q/R
31.260
31.260
31.260
31.260

GIMBAL
1.000
4.000
1.000
3.000

SPR
.916
.916
.916
.916



PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .887

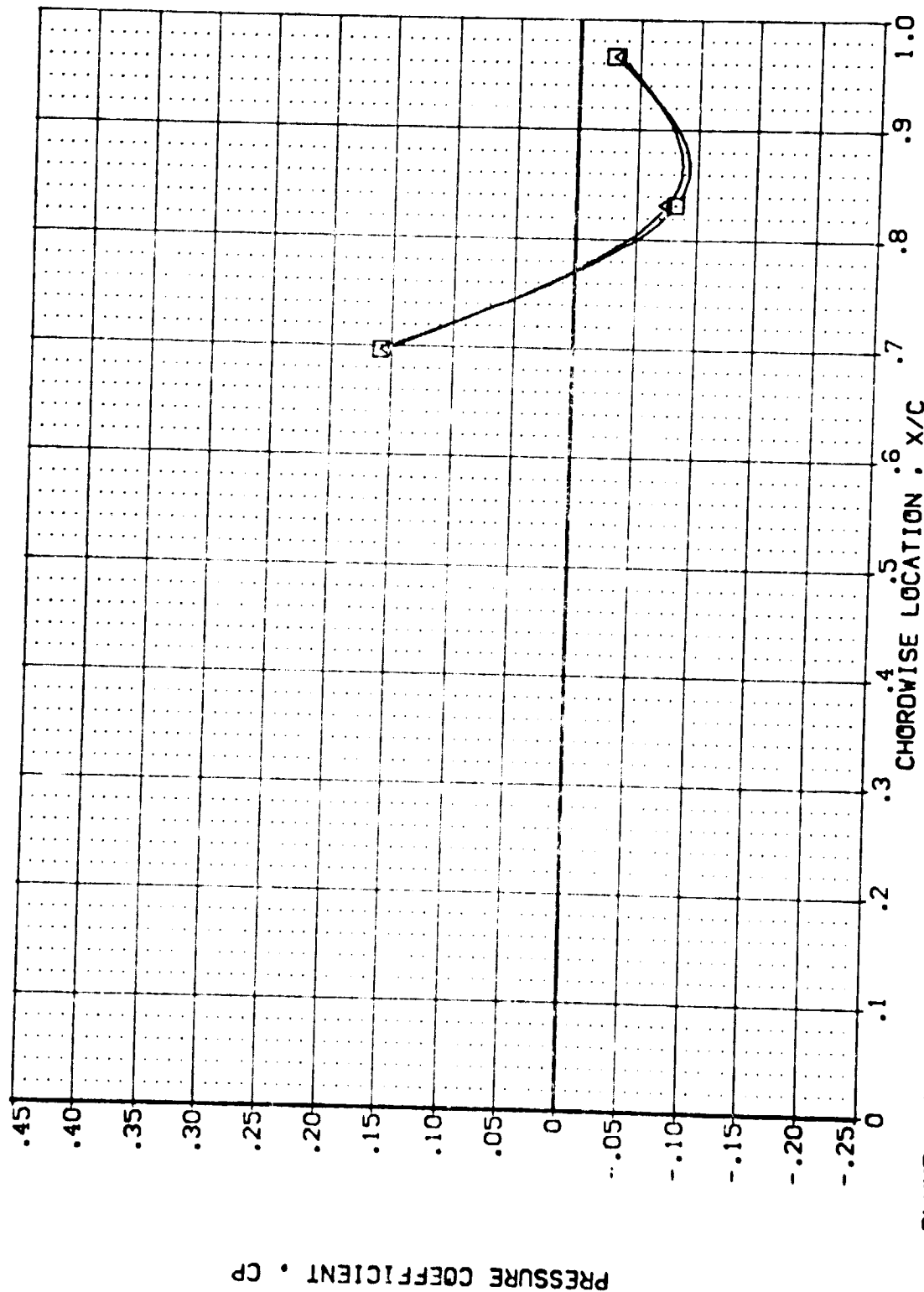
DATA SET SYMBOL

(LB7007)
(LB7008)
(LB7009)
(LB7010)
(LB7011)

CONFIGURATION DESCRIPTION

AVES 87-710 IAI2C 01 T1 SI LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 SI LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 SI LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 SI LOWER WING PRESSURE

POWER 1.000
CPR 31.260
SMPR .916
GIMBAL 1.000
1.000
4.000
1.000
3.000



PRESSURE COEFFICIENT, CP

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ037)
(LBZ038)
(LBZ039)
(LBZ040)
(LBZ041)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER

.000
1.000
1.000
1.000
1.000

Q/R

31.260
31.260
31.260
31.260
31.260

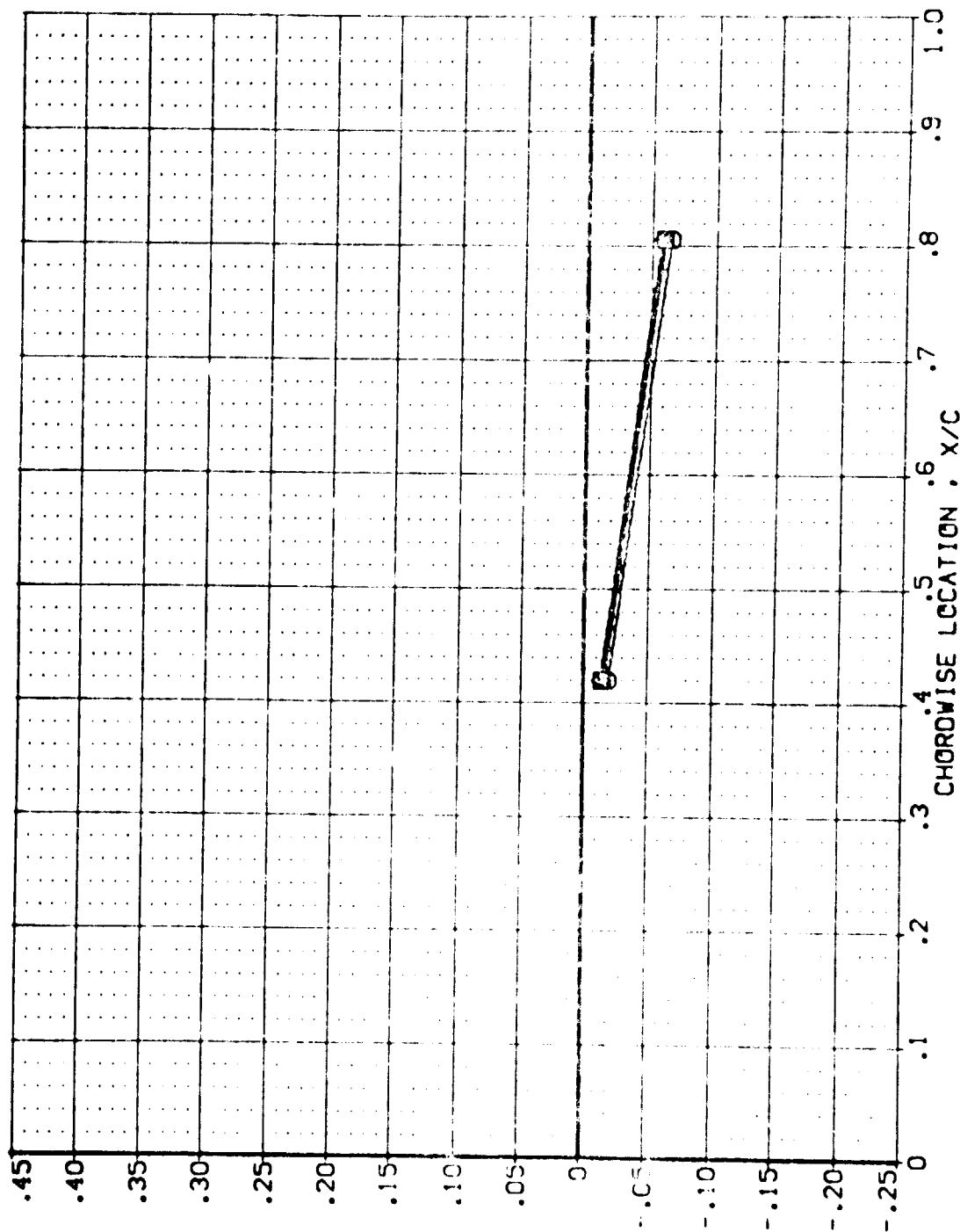
SR/PR

.916
.916
.916
.916
.916

GIMBAL

1.000
1.000
1.000
1.000
1.000

PRESSURE COEFFICIENT, CP



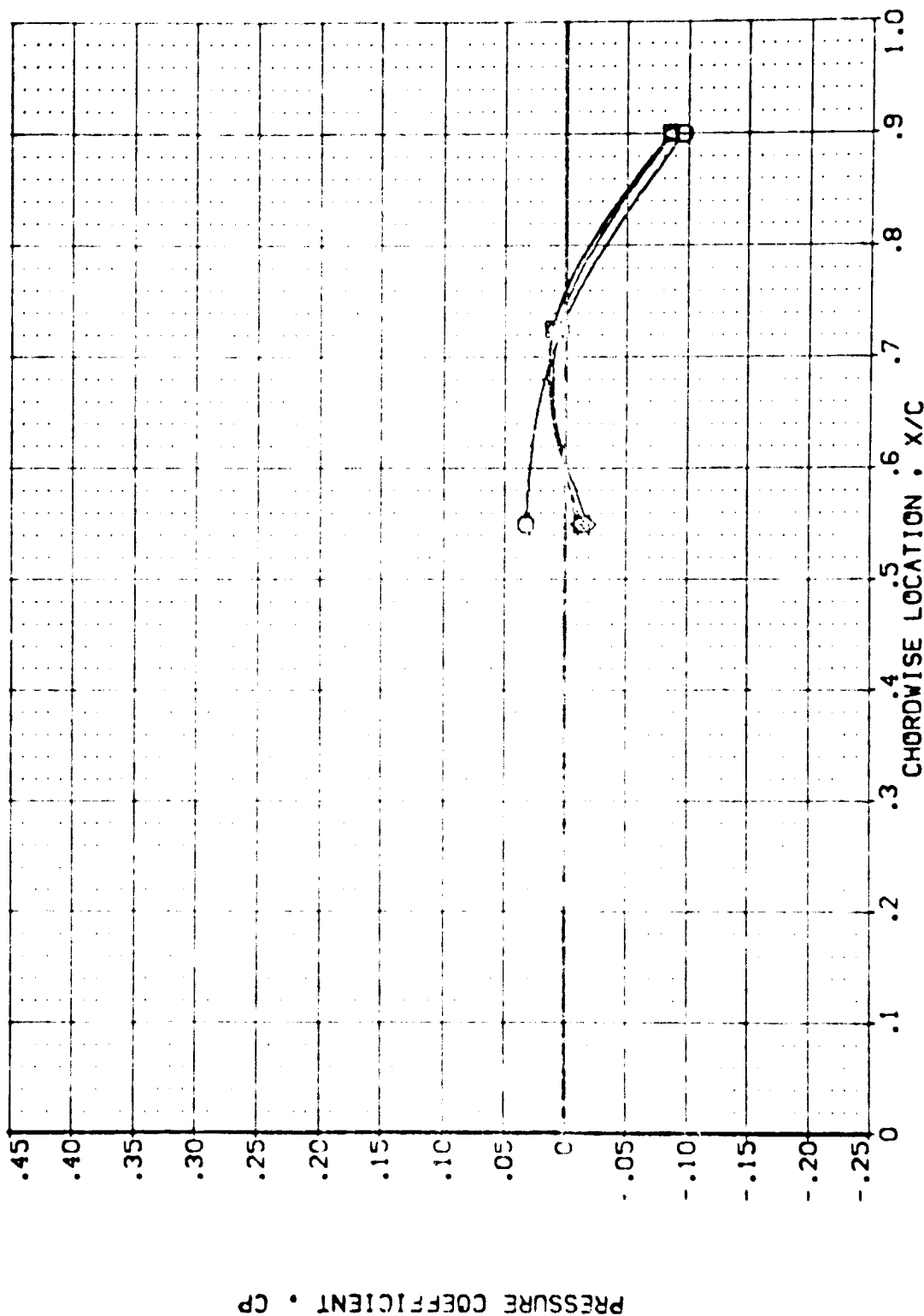
PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .427

PAGE 350

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SNRPR	GIMBAL
(LB/037)	AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	1.000	31.260	.916	1.000
(LB/038)	AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	1.000	31.260	.916	4.000
(LB/034)	AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	1.000	31.260	.916	1.000
(LB/036)	AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	1.000	31.260	.916	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

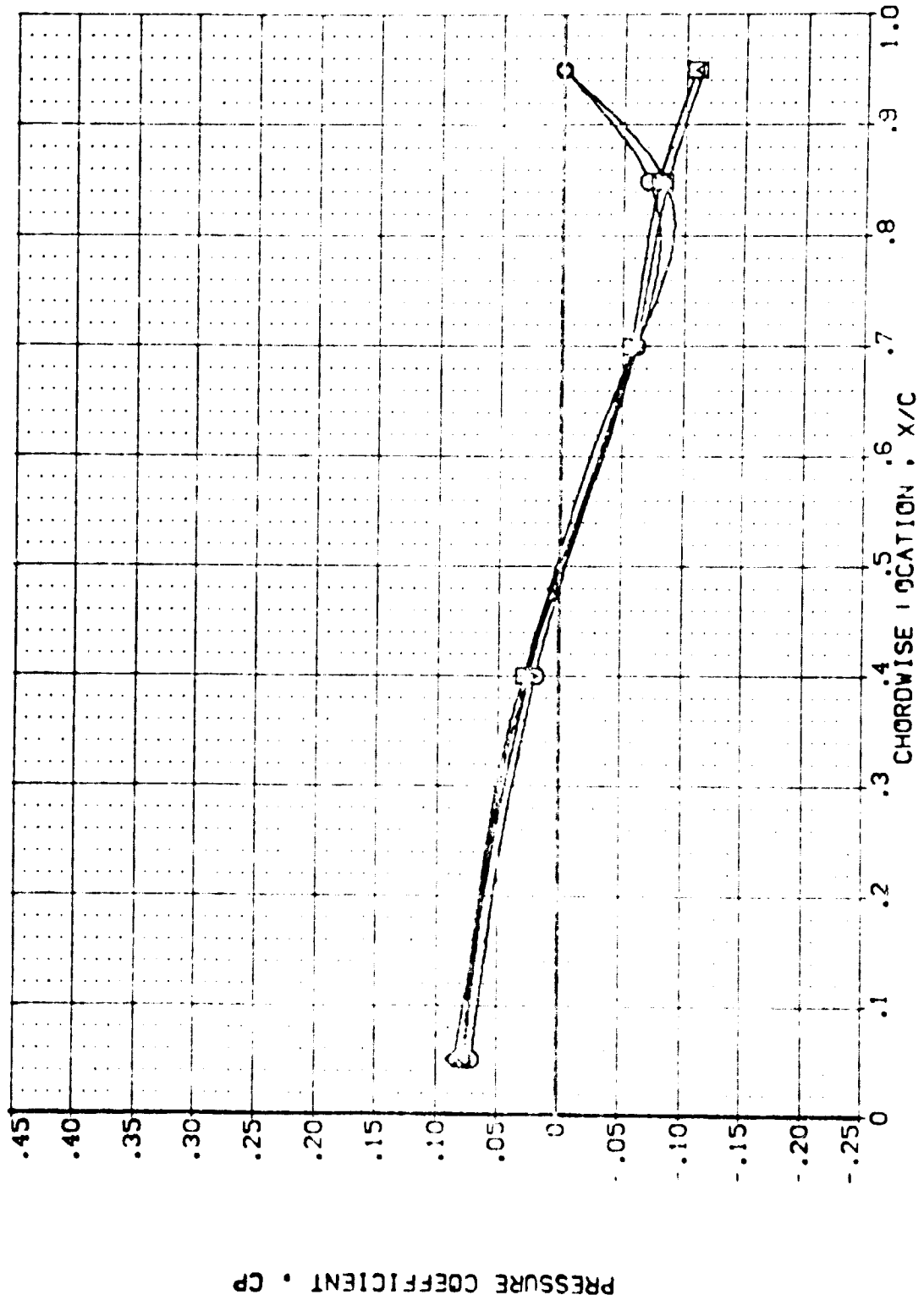
MACH = 2.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB2037)	AVES 87-710	IAIZC 01 T1 S1	LOWER WING PRESSURE
(LB2038)	AVES 87-710	IAIZC 01 T1 S1	LOWER WING PRESSURE
(LB2039)	AVES 87-710	IAIZC 01 T1 S1	LOWER WING PRESSURE
(LB2040)	AVES 87-710	IAIZC 01 T1 S1	LOWER WING PRESSURE
(LB2041)	AVES 87-710	IAIZC 01 T1 S1	LOWER WING PRESSURE

POWER UPR SAPP GIMBAL

.000	31.280	.916	1.000
1.000	31.280	.916	4.000
1.000	31.280	.916	1.000
1.000	31.280	.916	3.000



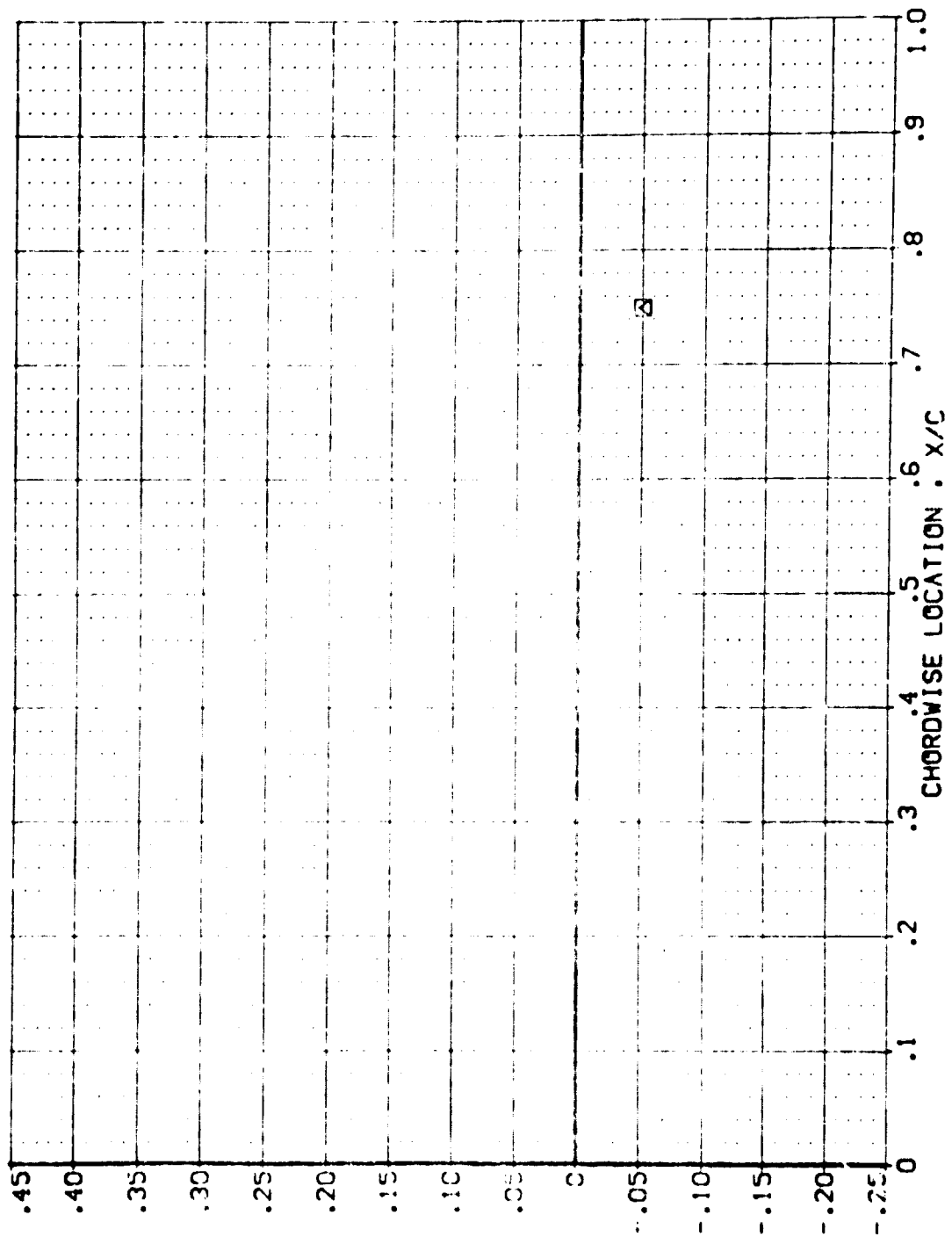
PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .673

PAGE 352

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LB.007) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LB.008) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LB.009) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LB.010) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER C/P R S/P R GIMBAL
 .000 31.260 1.000
 1.000 31.260 .916
 1.000 31.260 .916
 1.000 31.260 .916



PRESSURE COEFFICIENT • CP

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM
 MACH = 2.500 ALPHA = .000 Y/B = .780
 PAGE 353

DATA SET SYMBOL

(LBZ037)
(LBZ059)
(LBZ034)
(LBZ056)

CONFIGURATION DESCRIPTION

AVES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE
AVES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE
AVES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE
AVES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE

POWER

.000
1.000
1.000
1.000

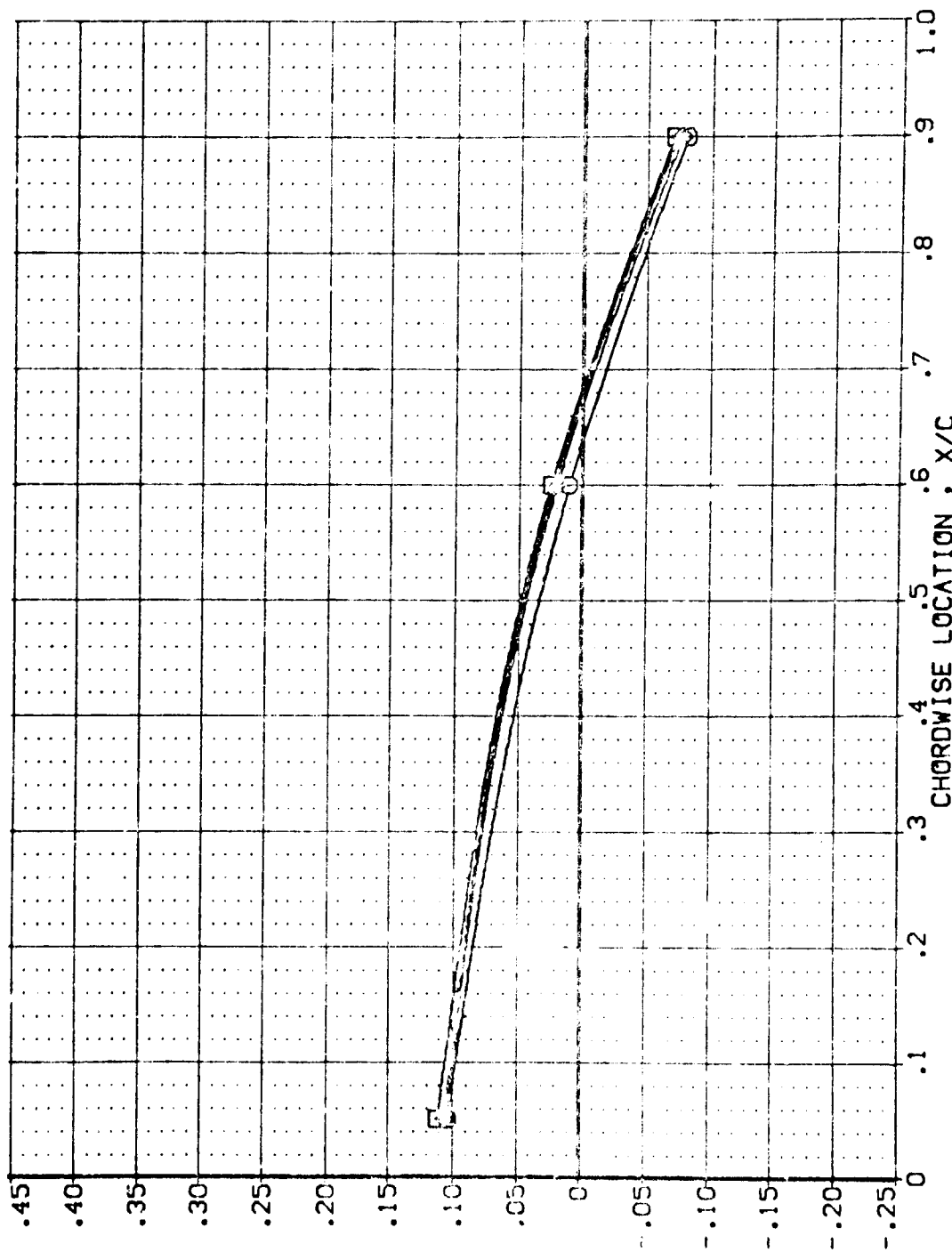
QPR

31.260
31.260
31.260
31.260

GIMBAL

1.000
4.000
1.000
3.000

PRESSURE COEFFICIENT • CP



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .887

PAGE 354

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB7037)
(LB7039)
(LB703A)
(LB7036)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

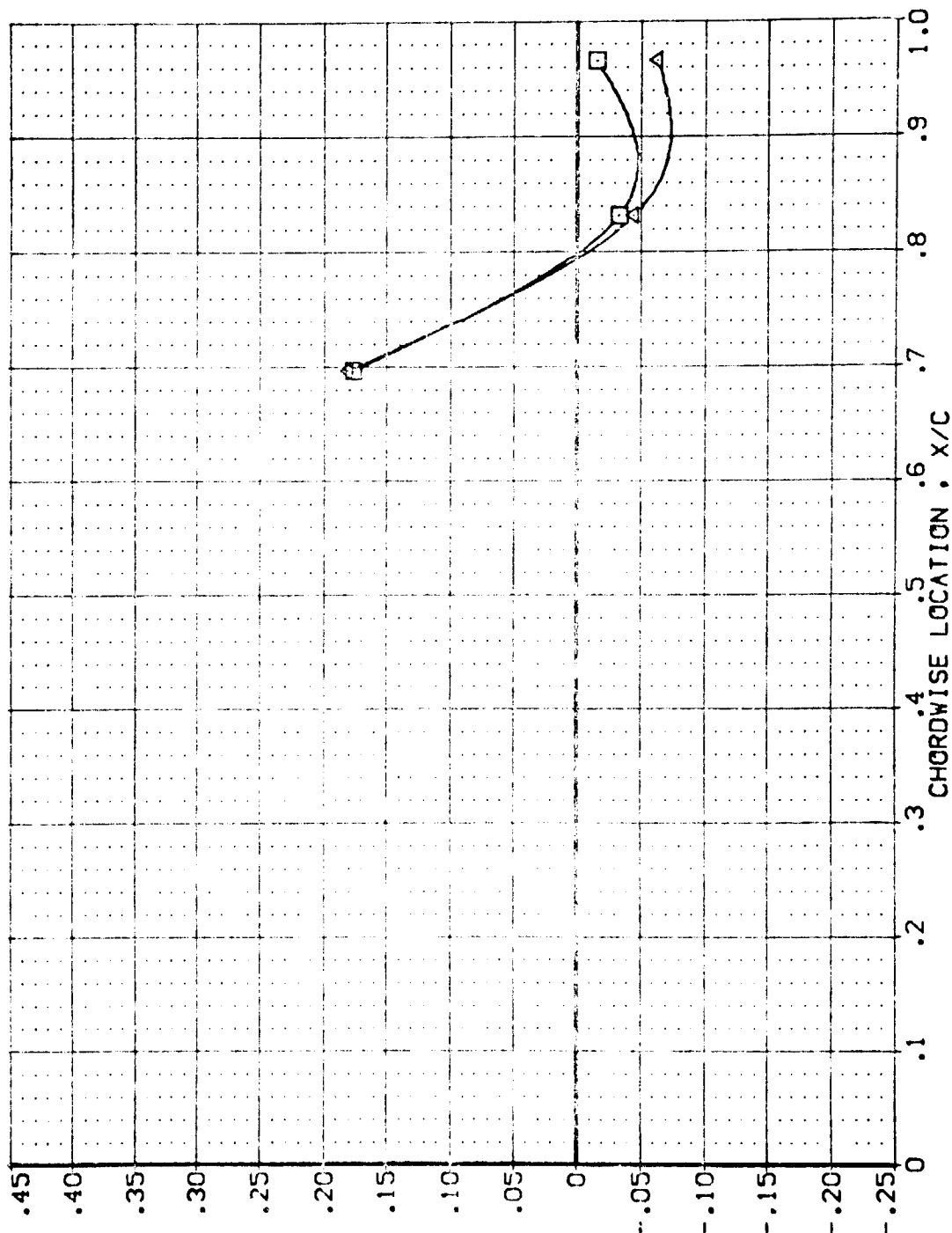
POWER .000
1.000
1.000
1.000

OPR 31.260
31.260
31.260
31.260

SNPR .916
.916
.916
.916

GIMBAL 1.000
4.000
1.000
3.000

PRESSURE COEFFICIENT • CP



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .299

PAGE 355

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ037)
(LBZ038)
(LBZ039)
(LBZ040)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

1A12C 01 T1 S1
1A12C 01 T1 S1
1A12C 01 T1 S1
1A12C 01 T1 S1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

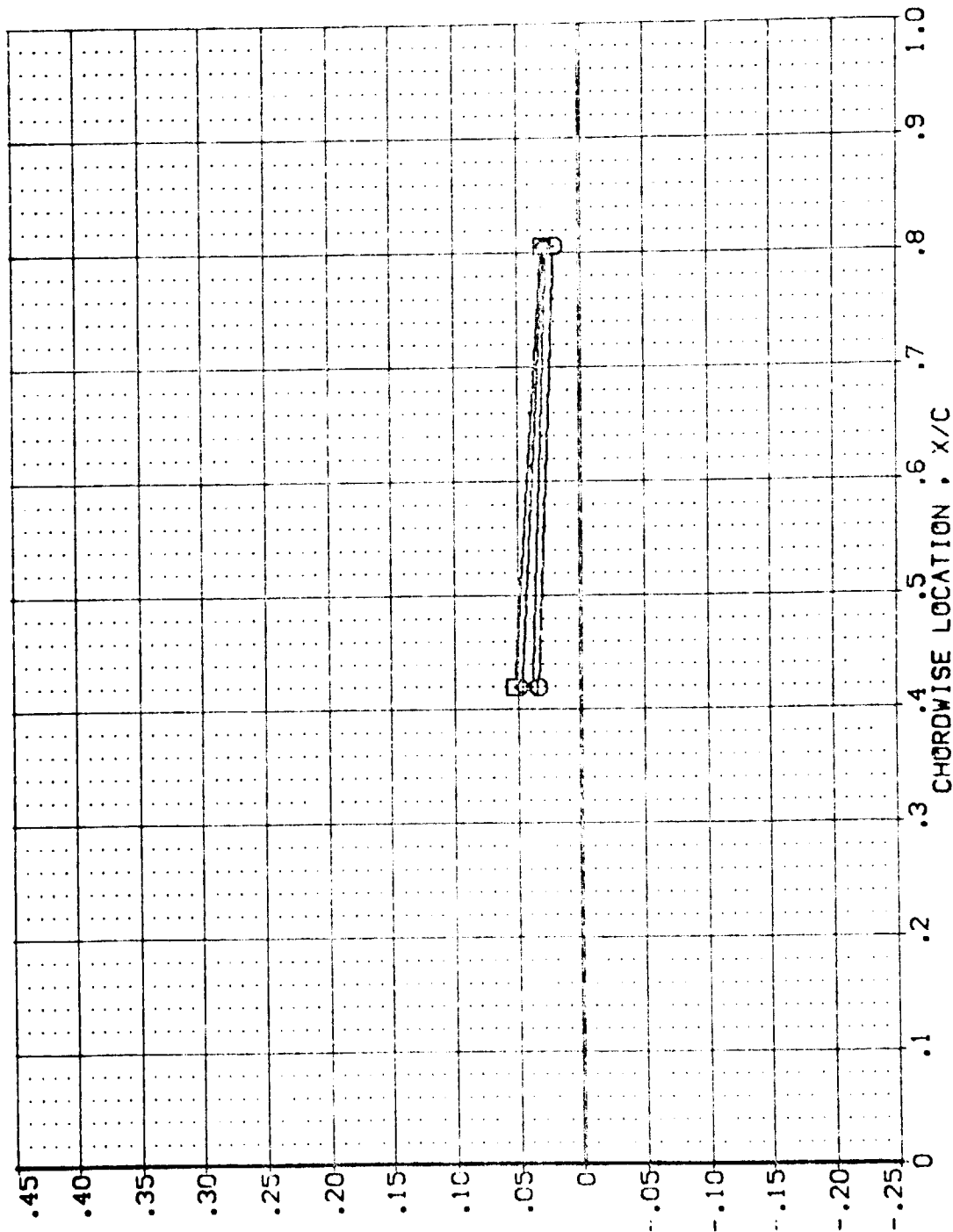
POWER 1.000
1.000
1.000
1.000

CPR 31.250
31.250
31.250
31.250

SWPR .916
.916
.916
.916

GIMBAL 1.000
4.000
1.000
3.000

PRESSURE COEFFICIENT • CP



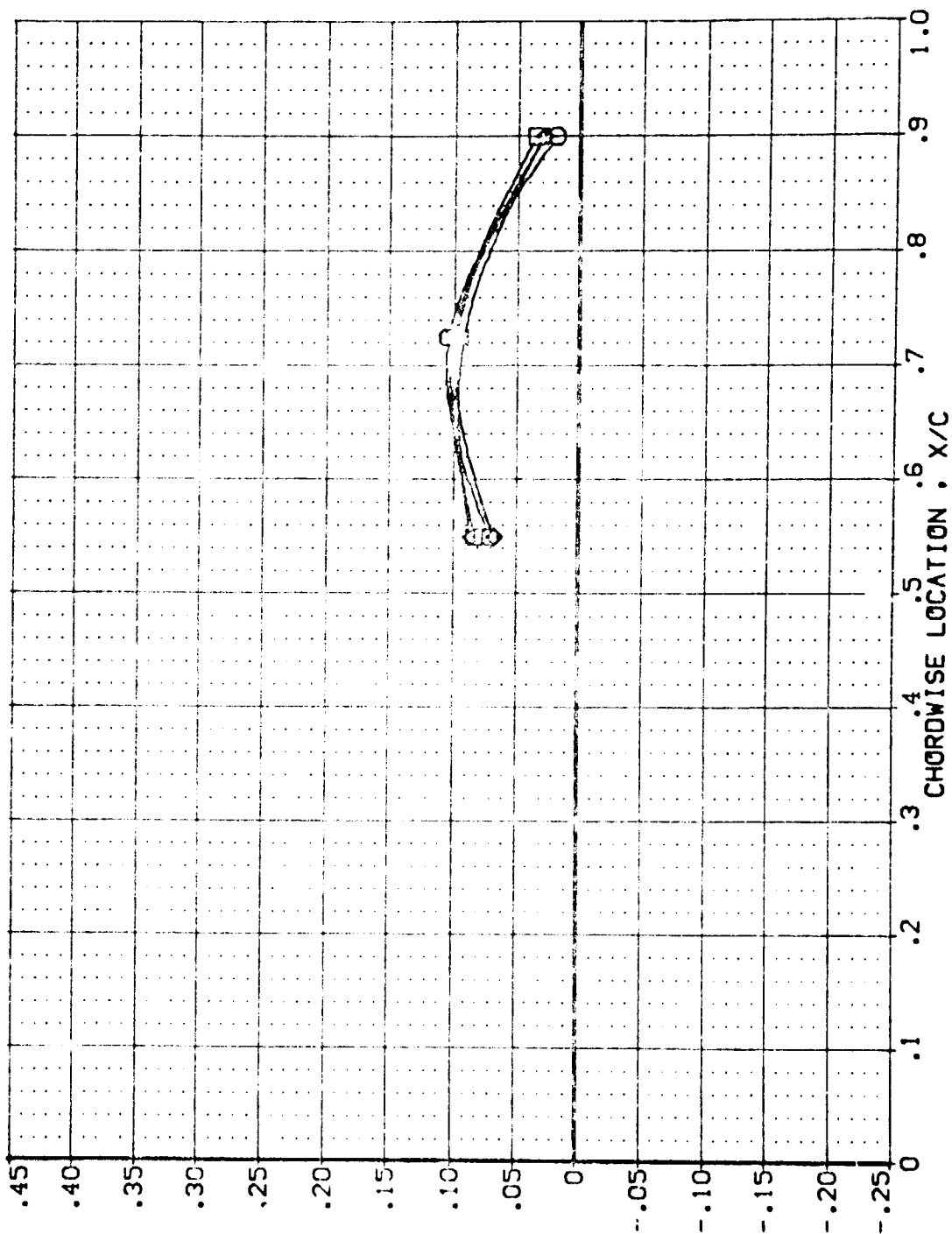
CHORDWISE LOCATION • X/C

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .427

PAGE 356

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	GPR	SRPR	GIMBAL
(LBZD37)	APES 87-710 [A] [Z] C [0] [1] [1] [1] S [1] LOWER WING PRESSURE	.000	31.260	.916	1.000
(LBZD38)	APES 87-710 [A] [Z] C [0] [1] [1] [1] S [1] LOWER WING PRESSURE	1.000	31.260	.916	4.000
(LBZD39)	APES 87-710 [A] [Z] C [0] [1] [1] [1] S [1] LOWER WING PRESSURE	1.000	31.260	.916	1.000
(LBZD36)	APES 87-710 [A] [Z] C [0] [1] [1] [1] S [1] LOWER WING PRESSURE	1.000	31.260	.916	3.000



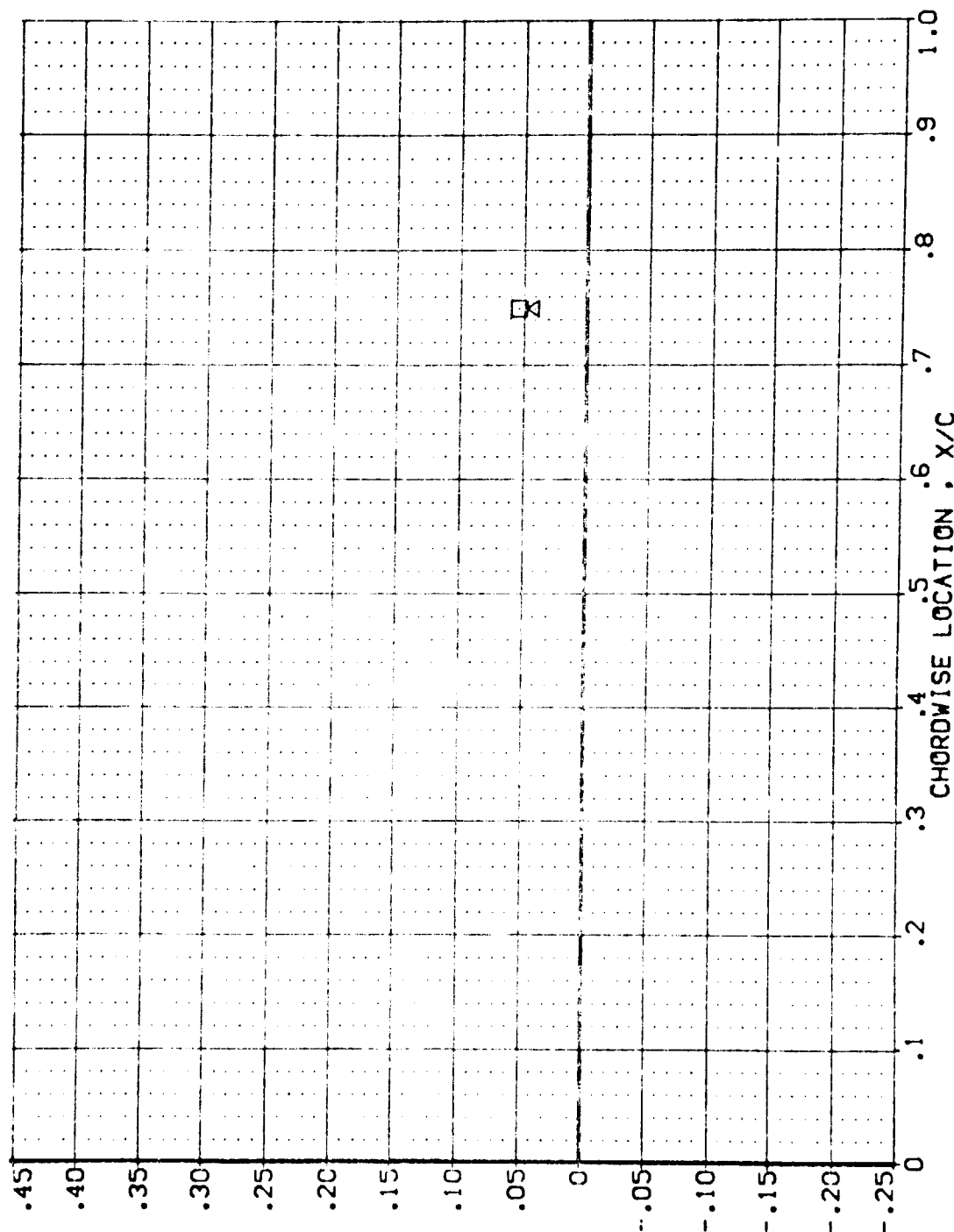
PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .534

PAGE 357

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LB7037) APES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LB7039) APES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LB7034) APES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LB7036) APES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER 0.000 31.260 0.916 1.000
 0.000 31.260 0.916 4.000
 1.000 31.260 0.916 1.000
 1.000 31.260 0.916 3.000



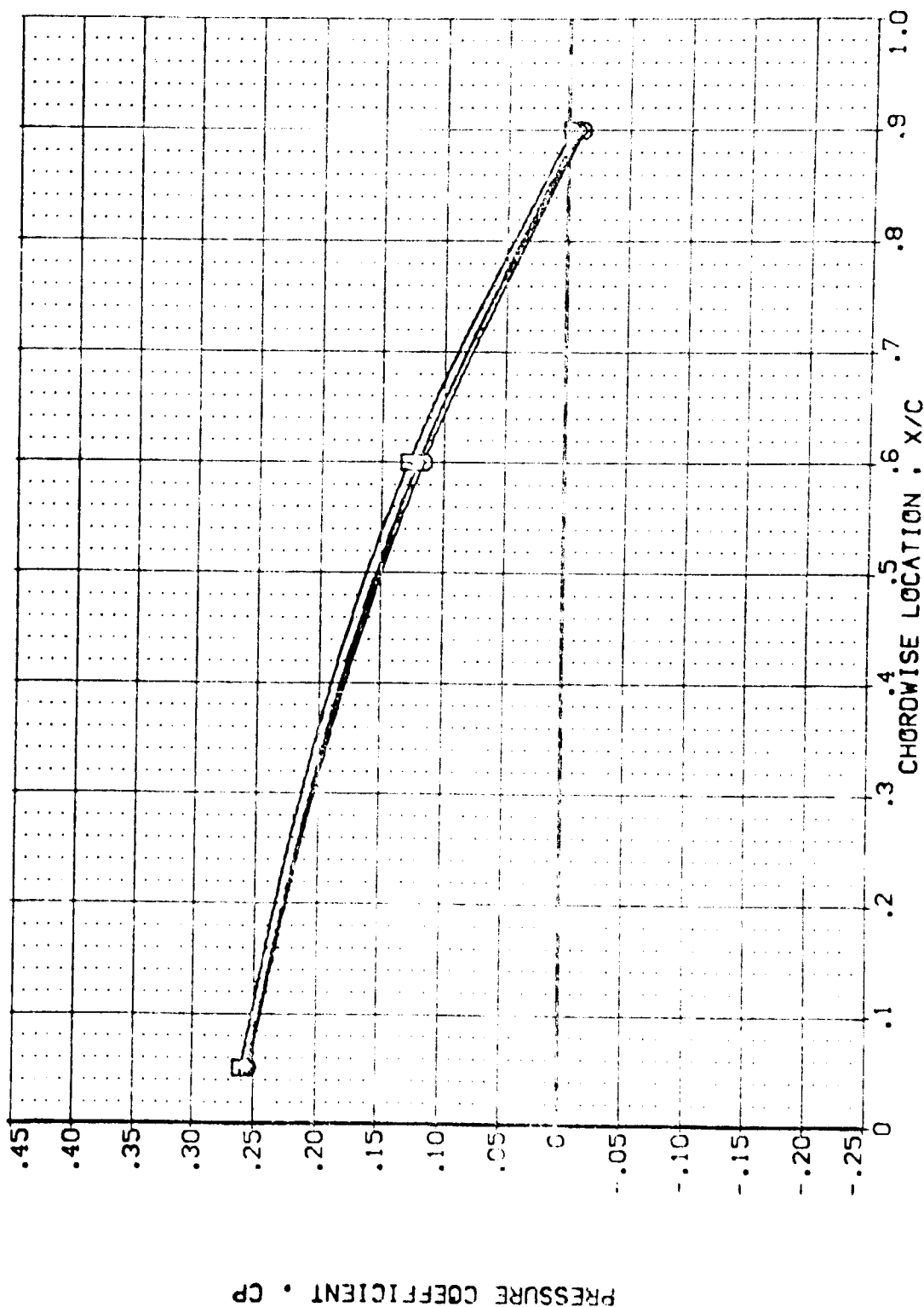
PRESSURE COEFFICIENT, CP

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZ037) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ038) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ039) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ034) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ036) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER 0.000 0.000 0.000 0.000
 1.000 1.000 1.000 1.000
 31.260 31.260 31.260 31.260
 0.916 0.916 0.916 0.916
 GIMBAL 1.000 4.000 1.000 3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .887

PAGE 360

DATA SET SYMBOL
(LB2008)
(LB2103)
(LB2041)
(LB2088)

CONFIGURATION DESCRIPTION
AVES 87-710 IAI2C 01 T1 S1
AVES 87-710 IAI2C 01 T1 S1
AVES 87-710 IAI2C 01 T1 S1
AVES 87-710 IAI2C 01 T1 S1

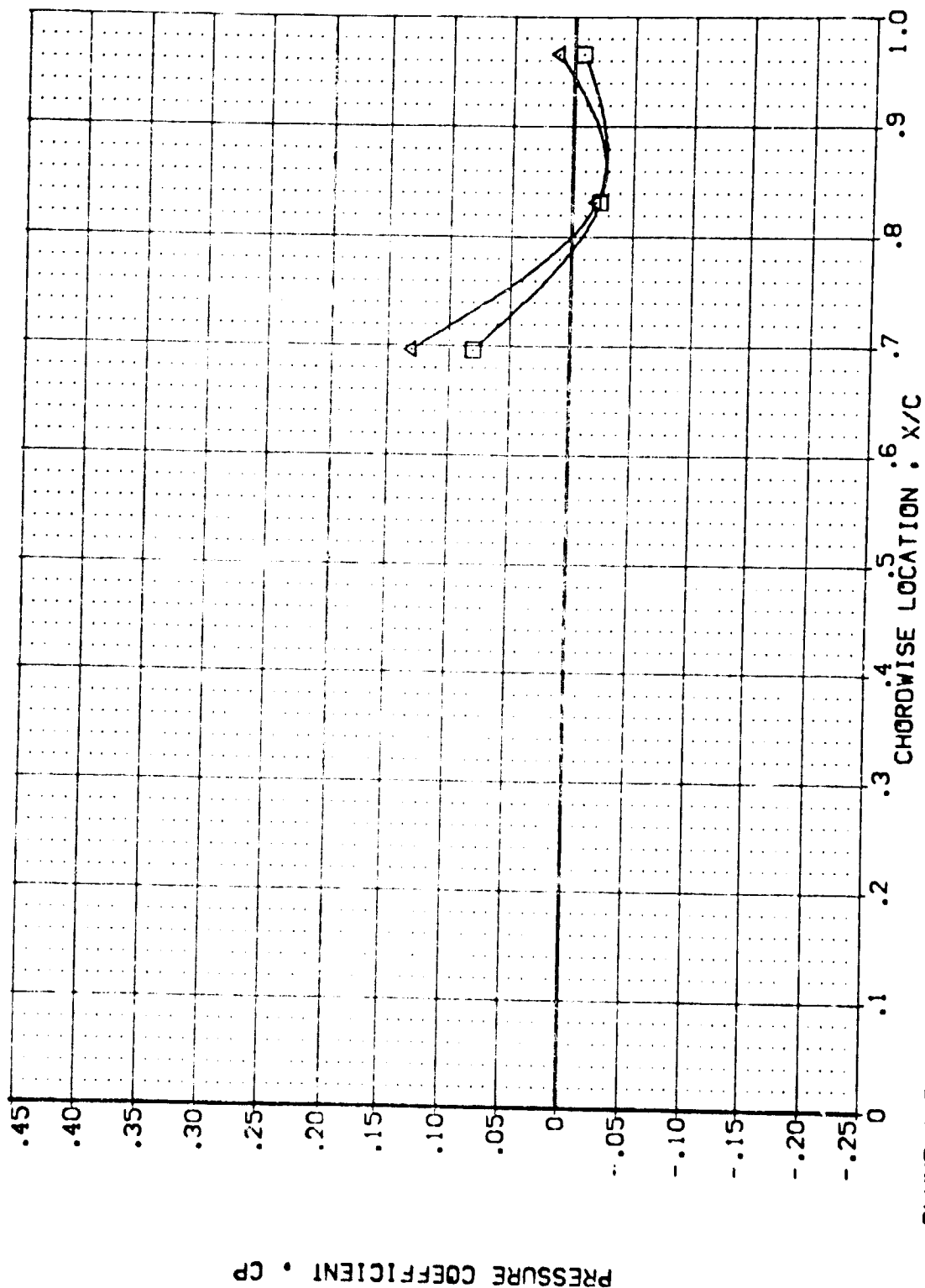
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER
0.000
1.000
1.000
1.000

QPR
26.860
26.860
26.860
26.860

SMFR
.768
.768
.768
.768

GIMBAL
1.000
4.000
1.000
3.000



PRESSURE COEFFICIENT • CP

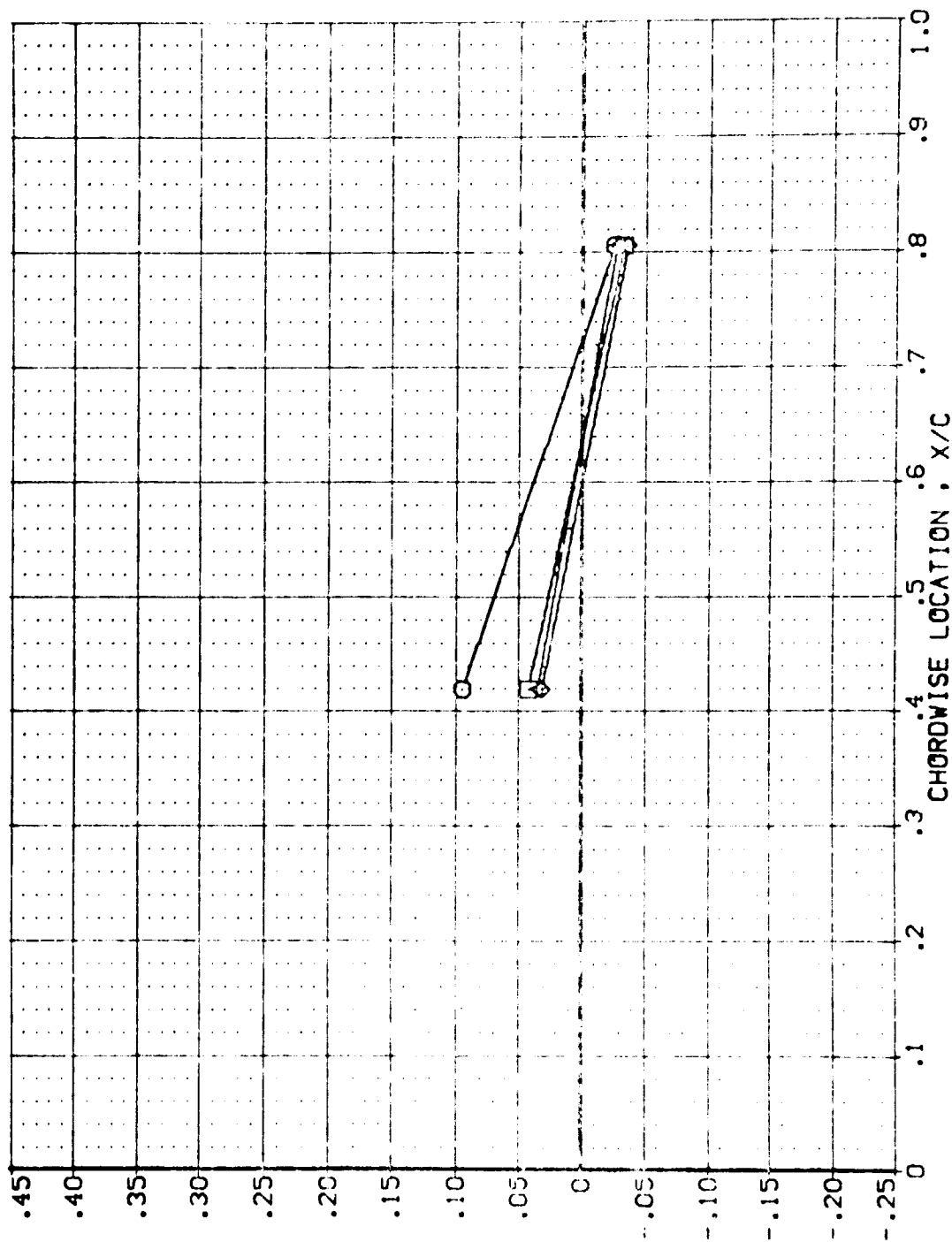
PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .259

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LB2038) APES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
 (LB2103) APES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
 (LB2041) APES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
 (LB2088) APES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE

POWER 0.000 25.860 25.860 25.860
 GIMBAL 1.000 4.000 1.000 3.000

PRESSURE COEFFICIENT • CP



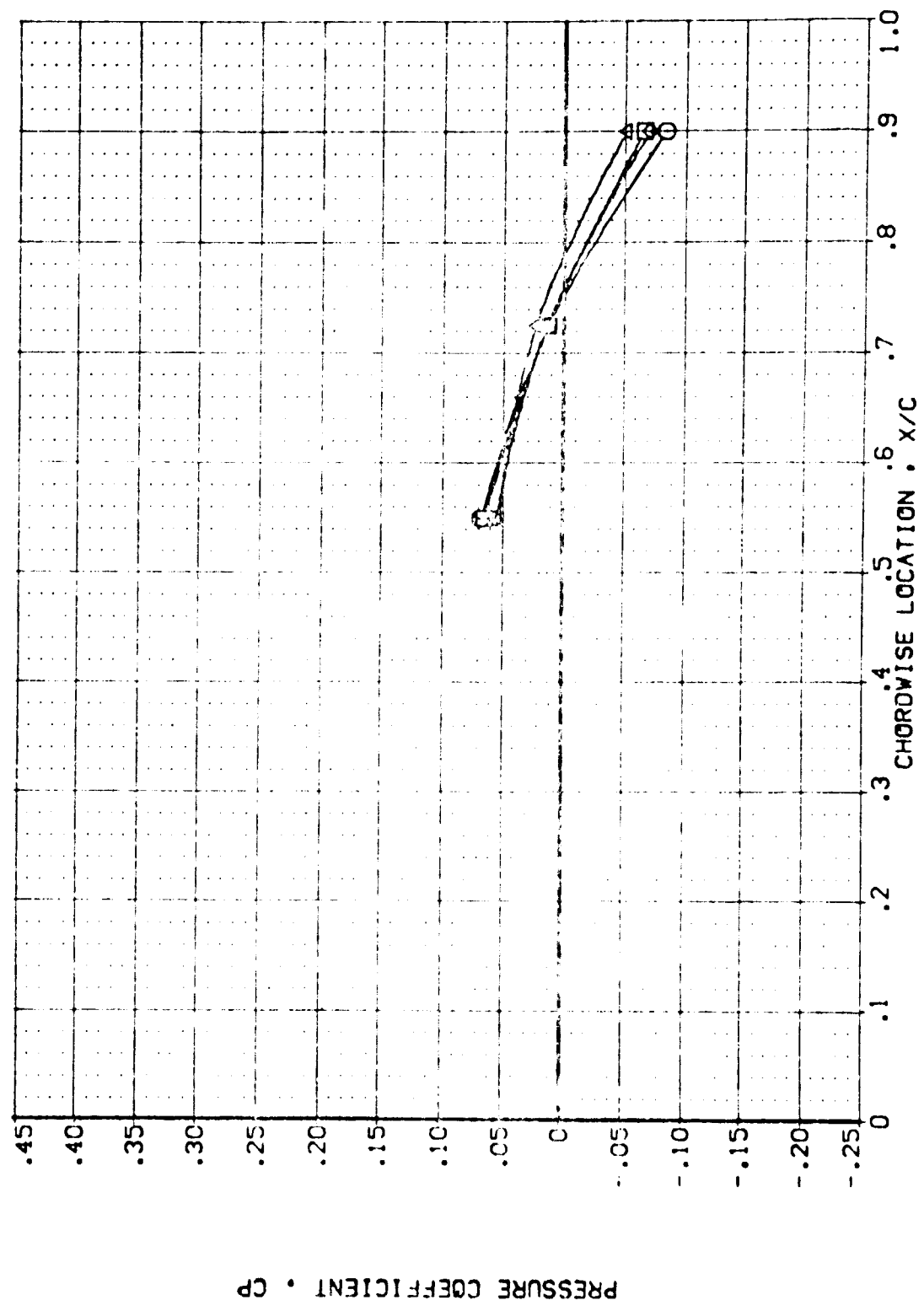
PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.000 ALPHA = -8.000 r/B = .427

PAGE 362

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ038)	AVES 87-710	IA	2C	01	TI	SI	LOWER WING PRESSURE	POWER	OPR	SPRPR	GIMBAL
(LBZ103)	AVES 87-710	IA	2C	01	TI	SI	LOWER WING PRESSURE	.000	26.860	.768	1.000
(LBZ041)	AVES 87-710	IA	2C	01	TI	SI	LOWER WING PRESSURE	1.000	26.860	.768	4.000
(LBZ088)	AVES 87-710	IA	2C	01	TI	SI	LOWER WING PRESSURE	1.000	26.860	.768	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB2008)
(LB2103)
(LB2041)
(LB2088)

AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

LA12C 01 TI SI
LA12C 01 TI SI
LA12C 01 TI SI
LA12C 01 TI SI

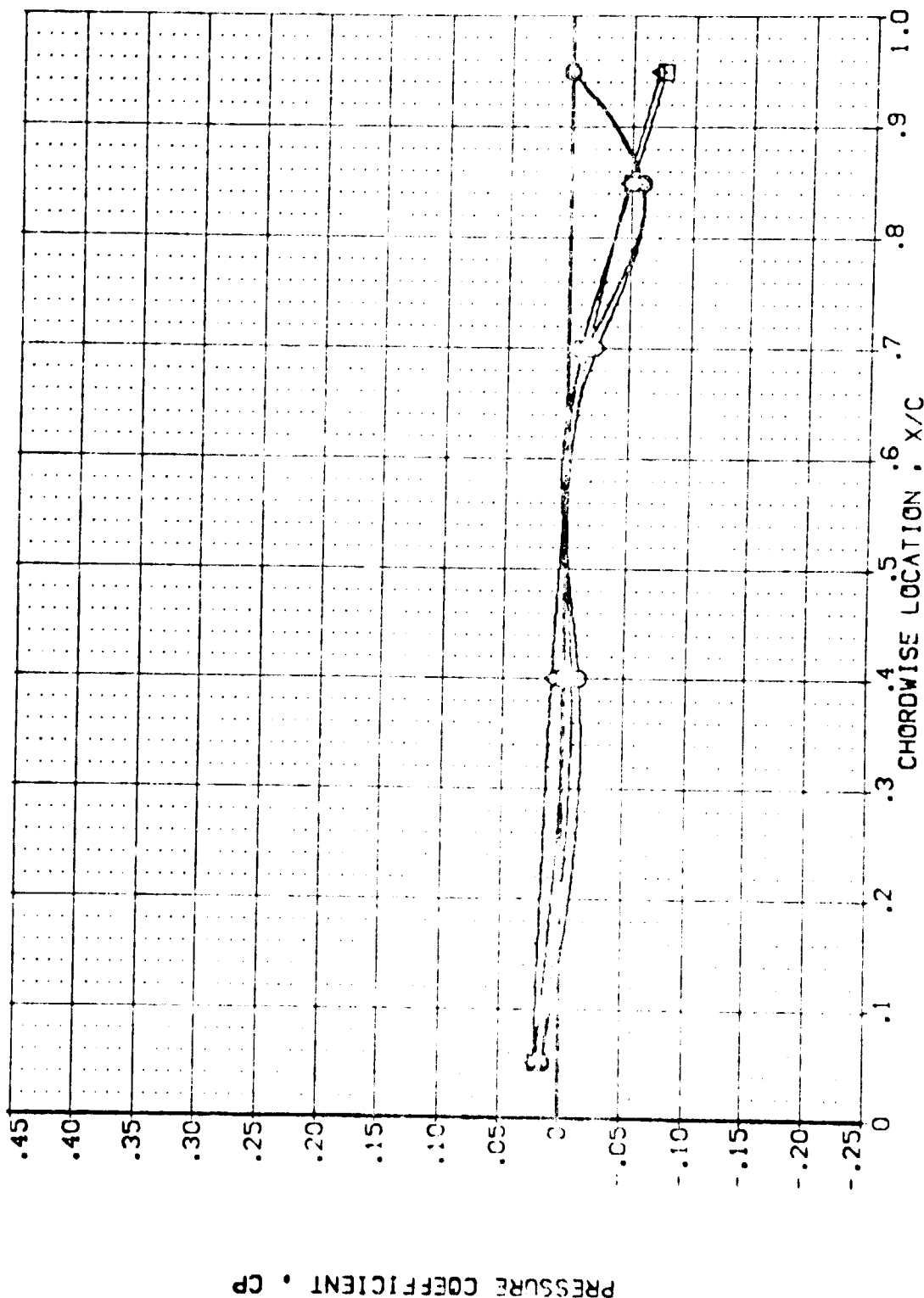
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER
.000
1.000
1.000
1.000

UFR
26.860
26.860
26.860

SR-PR
.768
.768
.768

GIMBAL
1.000
4.000
1.000
3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .673

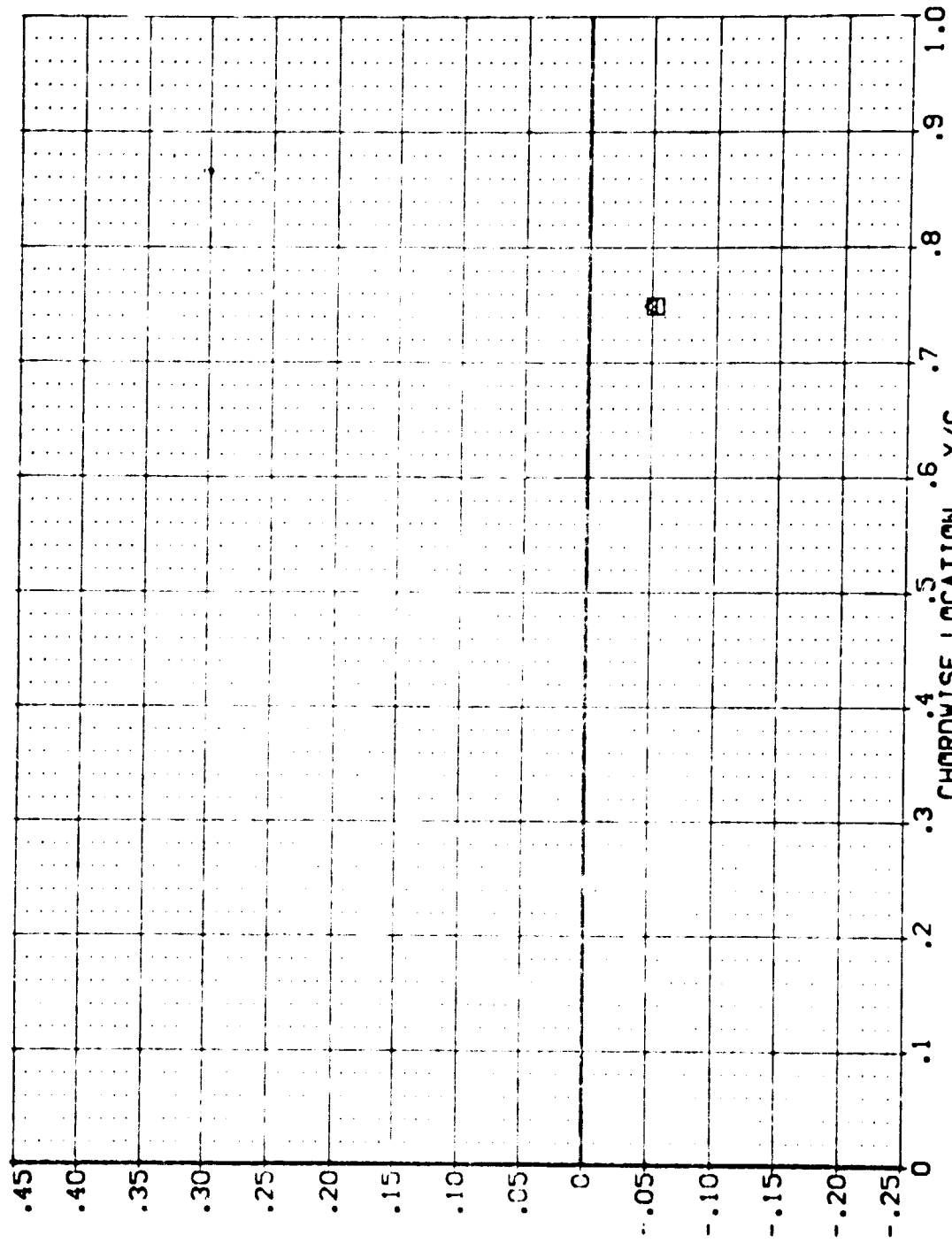
DATA SET SYMBOL: (LB2008) (LB2103) (LB2041) (LB2088)

CONFIGURATION DESCRIPTION: AYES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE
 AYES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE
 AYES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE
 AYES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE

POWER: .000 26.860 26.860 26.860

SPR: .768 .768 .768

GIMBAL: 1.000 4.000 1.000 3.000



PRESSURE COEFFICIENT • CP

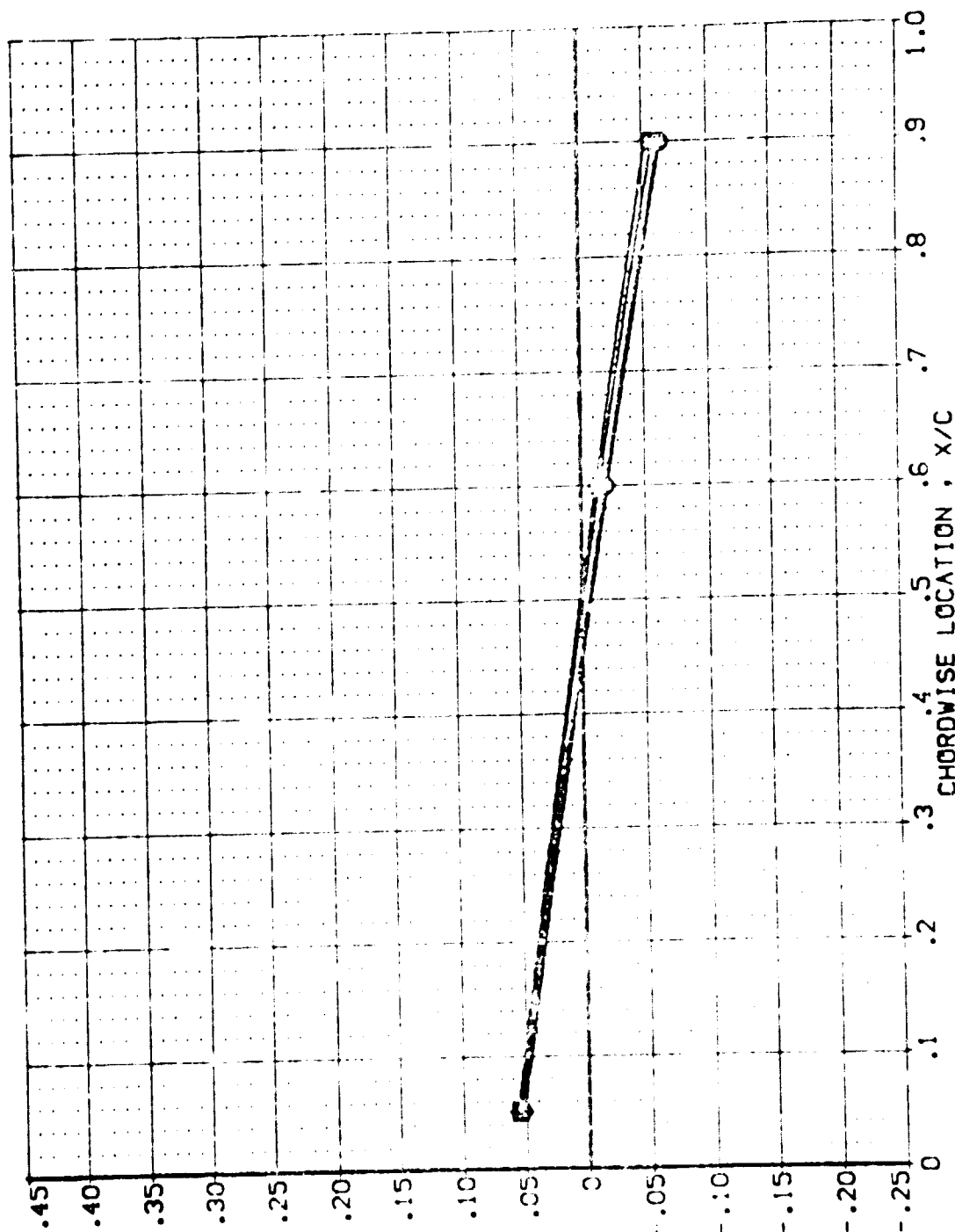
CHORDWISE LOCATION • X/C

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZD88) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ100) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZD88) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZD88) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER G/R SPOOR GIMBAL
 .000 26.080 1.000 1.000
 1.000 26.080 .768 4.000
 1.000 26.080 .768 1.000
 1.000 26.080 .768 3.000

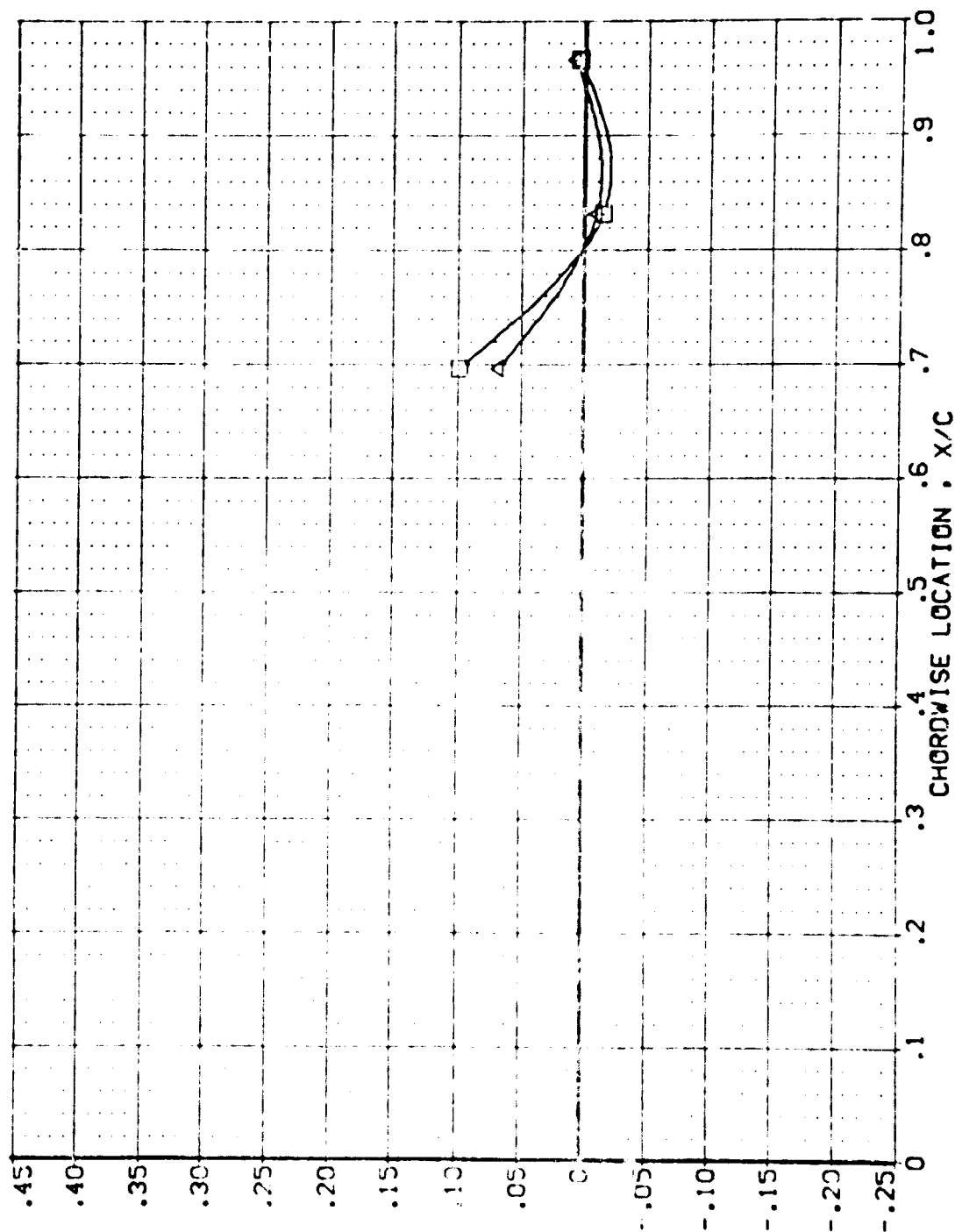


PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LB2000) AHS 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LB2100) AHS 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LB2041) AHS 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LB2000) AHS 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER DFR SPRR GIMBAL
 .000 26.860 .760 1.000
 1.000 26.860 .760 4.000
 1.000 26.860 .760 1.000
 1.000 26.860 .760 3.000



PRESSURE COEFFICIENT • CP

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .299

DATA SET SYMBOL

(LBZD68)
(LBZD68)
(LBZD68)
(LBZD68)

AYES 87-710
AYES 87-710
AYES 87-710
AYES 87-710

IAIZC 01 T1 S1
IAIZC 01 T1 S1
IAIZC 01 T1 S1
IAIZC 01 T1 S1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

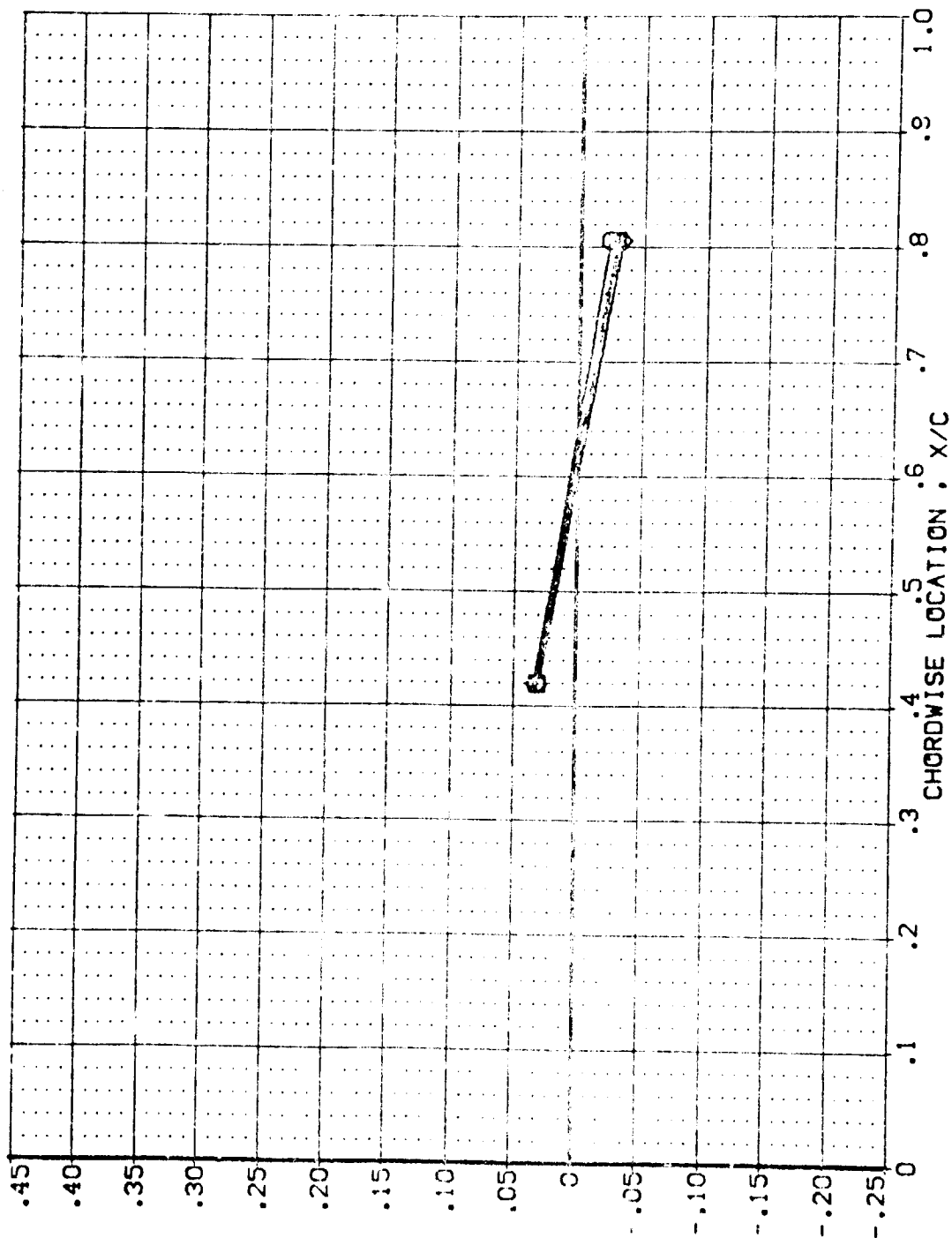
POWER .000
POWER .000
POWER .000
POWER .000

QPR 26.860
QPR 26.860
QPR 26.860
QPR 26.860

QCAR .768
QCAR .768
QCAR .768
QCAR .768

GIMBAL 1.000
GIMBAL 1.000
GIMBAL 1.000
GIMBAL 1.000

PRESSURE COEFFICIENT, CP



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

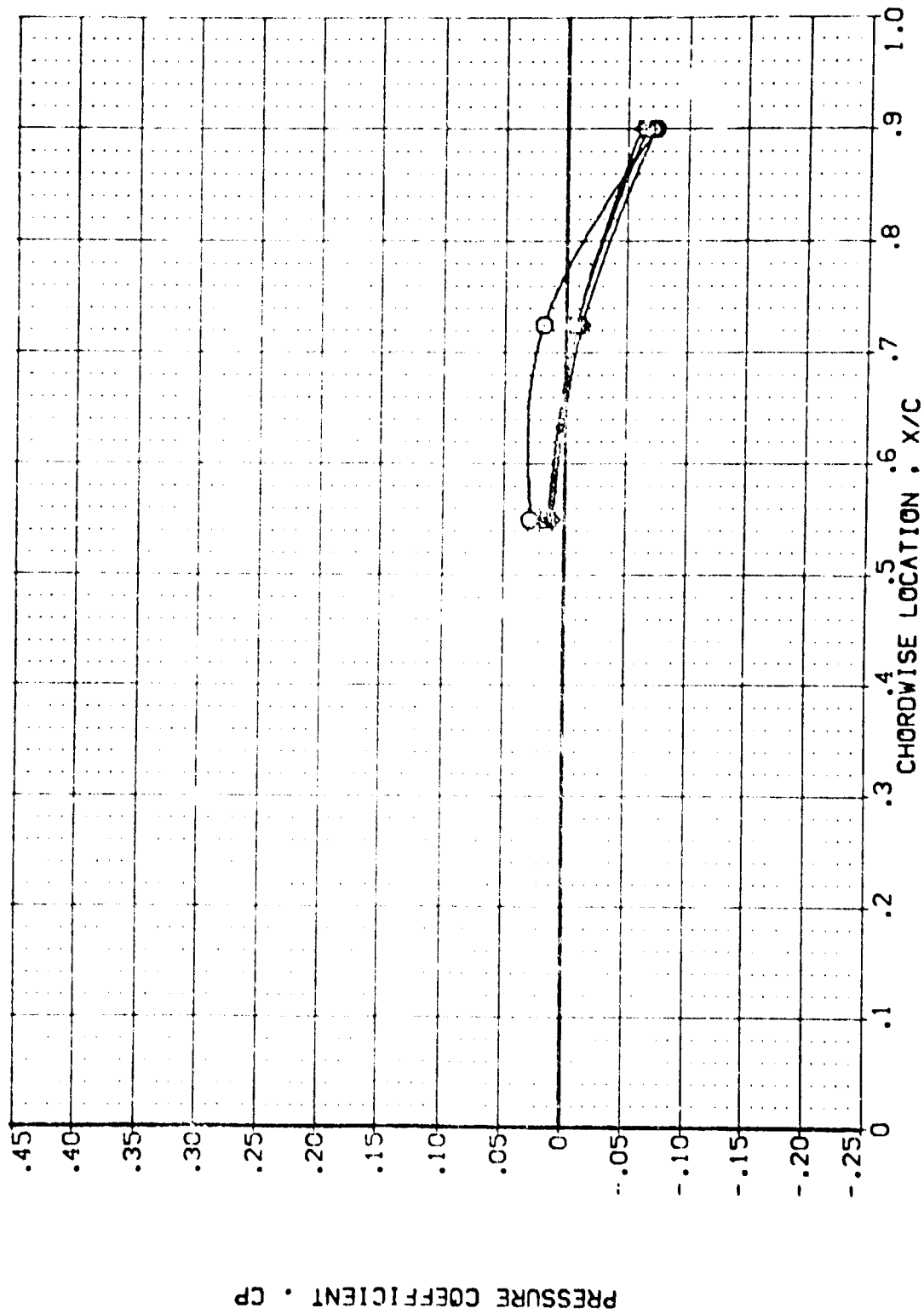
MACH = 3.000 ALPHA = .000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ008)	AVES 87-710	AI2C 01	T1	S1	LOWER WING PRESSURE
(LBZ103)	AVES 87-710	AI2C 01	T1	S1	LOWER WING PRESSURE
(LBZ041)	AVES 87-710	AI2C 01	T1	S1	LOWER WING PRESSURE
(LBZ068)	AVES 87-710	AI2C 01	T1	S1	LOWER WING PRESSURE

POWER DFR SPMR GIMBAL

.000	26.860	.768	1.000
1.000	26.860	.768	4.000
1.000	26.860	.768	1.000
1.000	26.860	.768	3.000

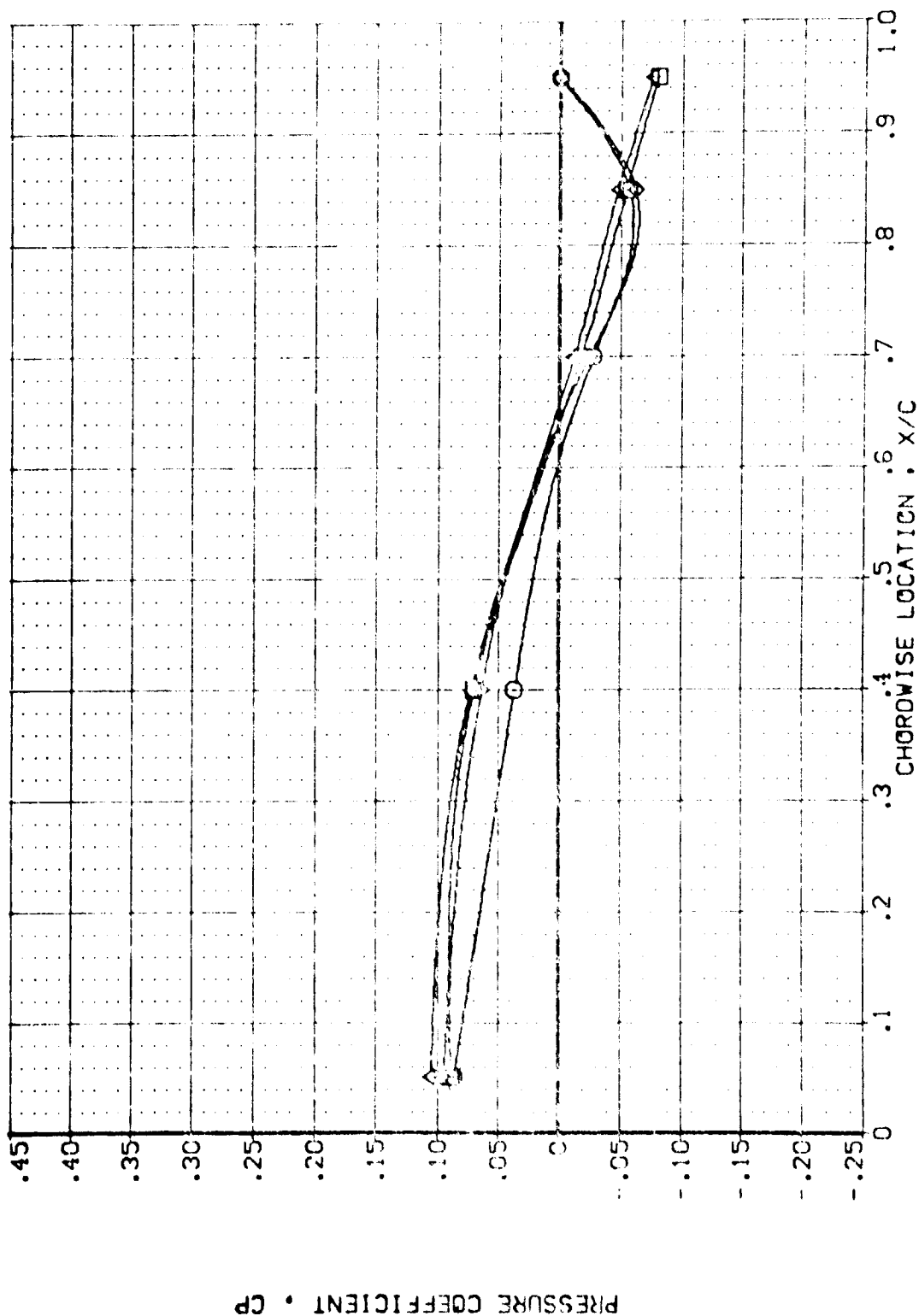


PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION





(LB7006)	Q	AMES 87-710	IAI	AC	DI	T1	SI	LOWER WING	PRESSURE	POWER	0.9	SEWER	GIMBAL
(LB7103)	X	AMES 87-710	IAI	AC	DI	T1	SI	LOWER WING	PRESSURE	1.000	25.860	.768	1.000
(LB7241)	X	AMES 87-710	IAI	AC	DI	T1	SI	LOWER WING	PRESSURE	1.000	26.820	.763	1.000
(LB7068)	X	AMES 87-710	IAI	AC	DI	T1	SI	LOWER WING	PRESSURE	1.000	25.820	.768	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .573

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ038) 
 (LBZ103) 
 (LBZ041) 
 (LBZ068) 

AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE
 AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE
 AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE
 AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE

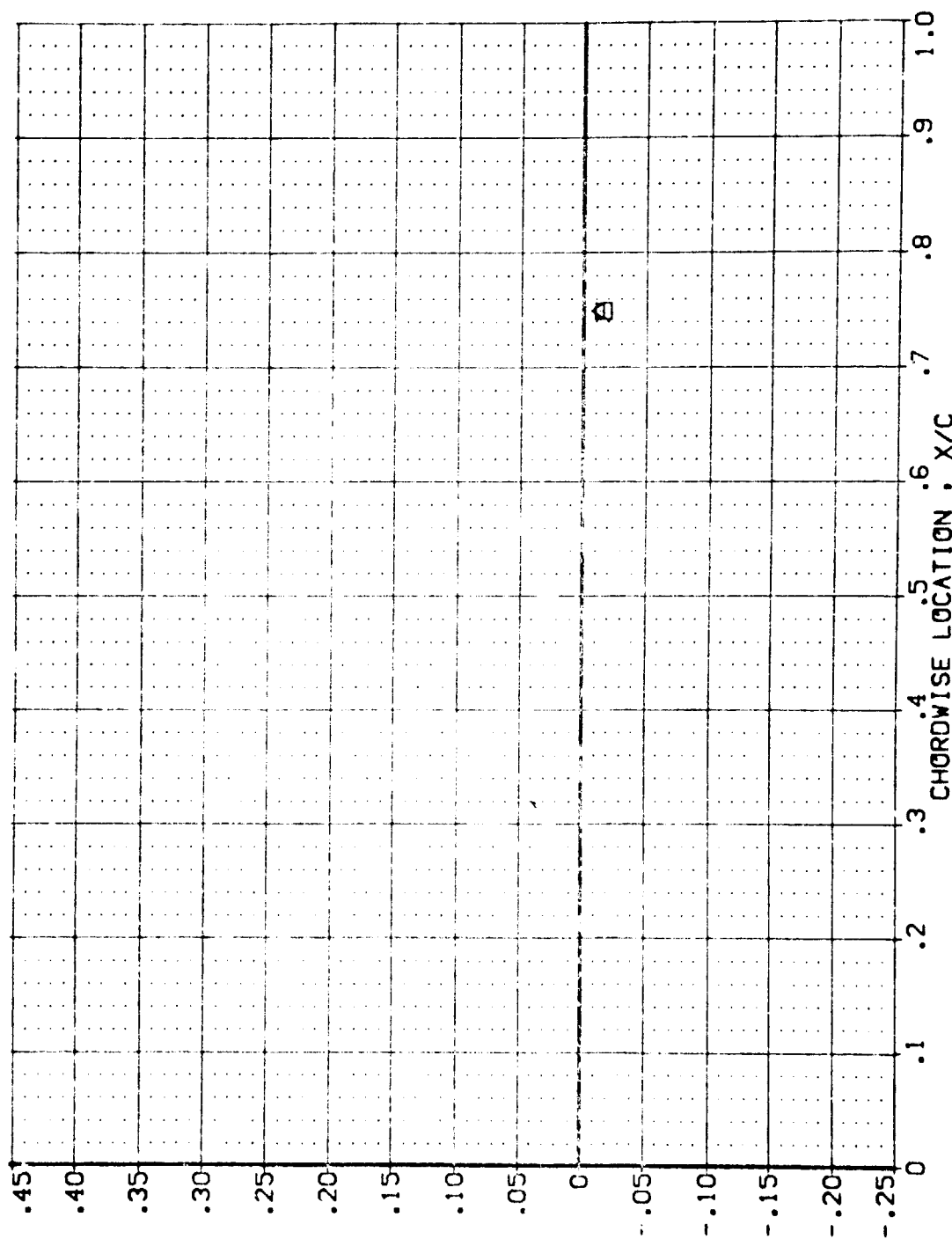
POWER .000
 .000 26.860
 1.000 26.130
 1.000 26.180
 1.000 26.180

SNPPR

GIMBAL

1.000
 4.000
 1.000
 3.000

PRESSURE COEFFICIENT - CP



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

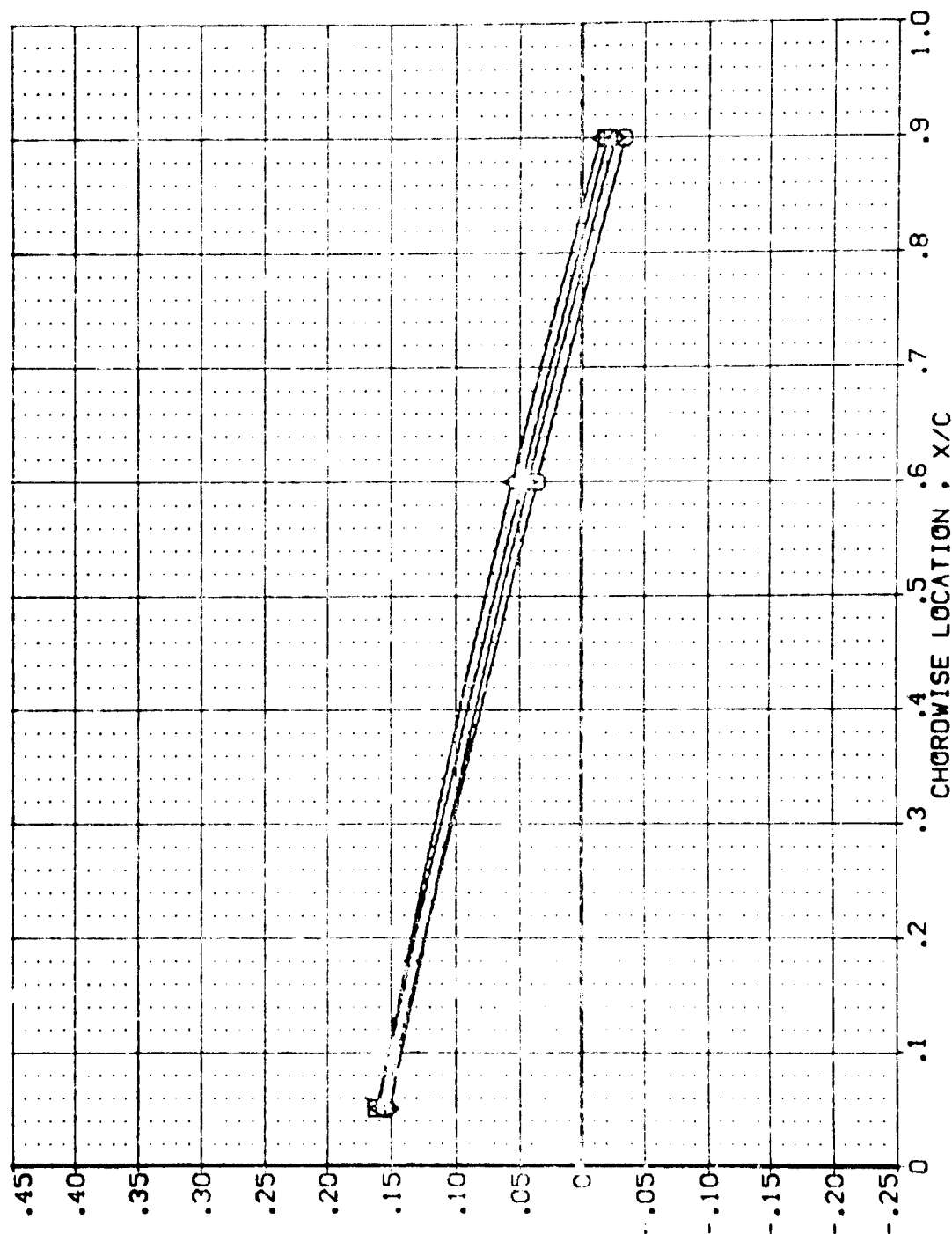
MACH = 3.000 ALPHA = .000 Y/B = .780

DATA SET SYMBOL

(LBZ038)
(LBZ103)
(LBZ041)
(LBZ088)

CONFIGURATION DESCRIPTION
AYES 87-710 [A] [Z] C 01 T1 S1 LOWER WING PRESSURE
AYES 87-710 [A] [Z] C 01 T1 S1 LOWER WING PRESSURE
AYES 87-710 [A] [Z] C 01 T1 S1 LOWER WING PRESSURE
AYES 87-710 [A] [Z] C 01 T1 S1 LOWER WING PRESSURE

POWER QPR SQPR GIMBAL
.000 26.850 1.000 1.000
1.000 26.850 .768 4.000
1.000 26.850 .768 1.000
1.000 26.850 .768 3.000



PRESSURE COEFFICIENT, CP

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .887

PAGE 372

DATA SET SYMBOL

(LBZ008)
(LBZ103)
(LBZ041)
(LBZ088)

CONFIGURATION DESCRIPTION

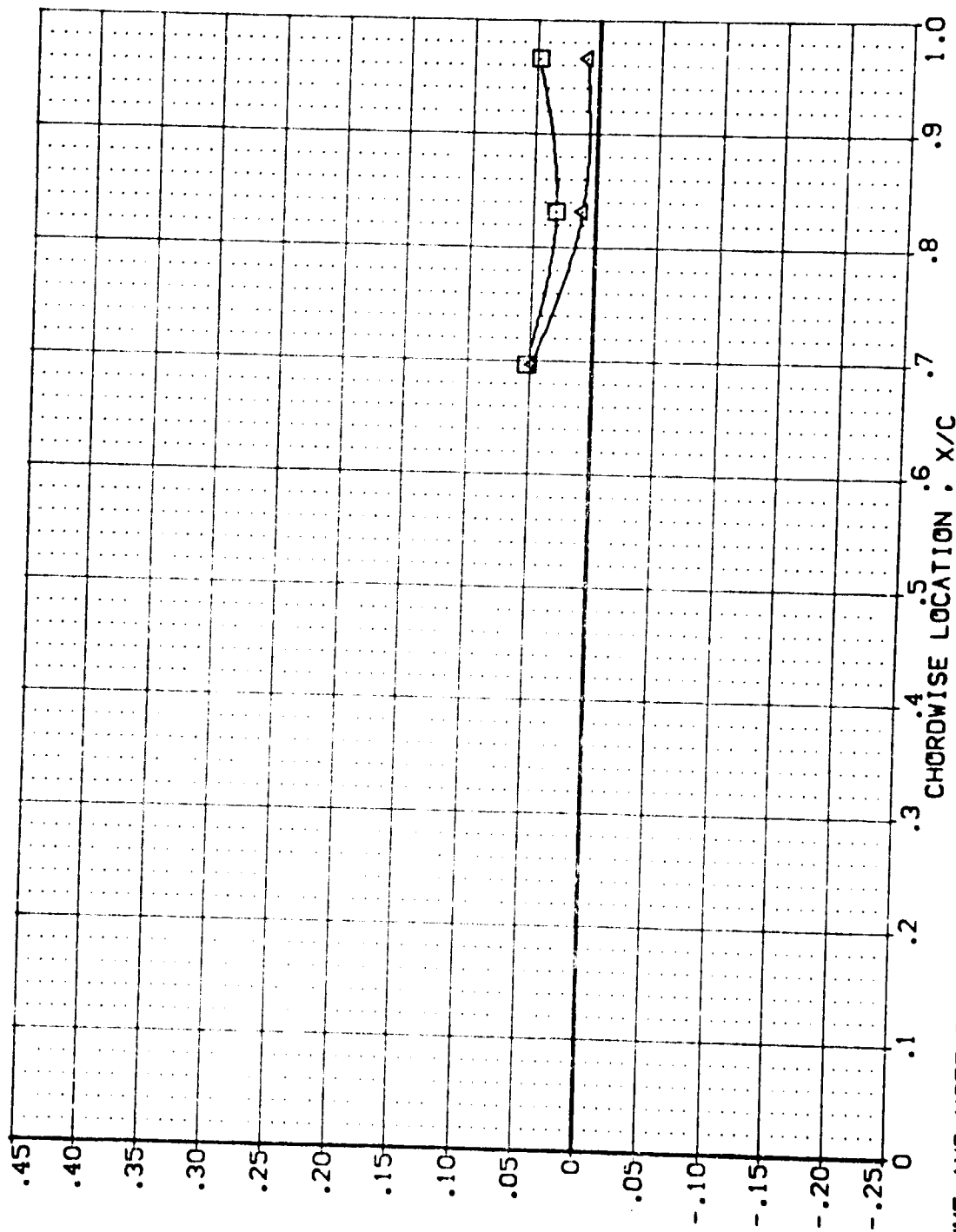
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE

POWER .000
1.000
1.000
1.000

CPR 26.803
26.630
26.660

SRPR .768
.768
.768

GIMBAL 1.000
4.000
1.000
3.000



PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

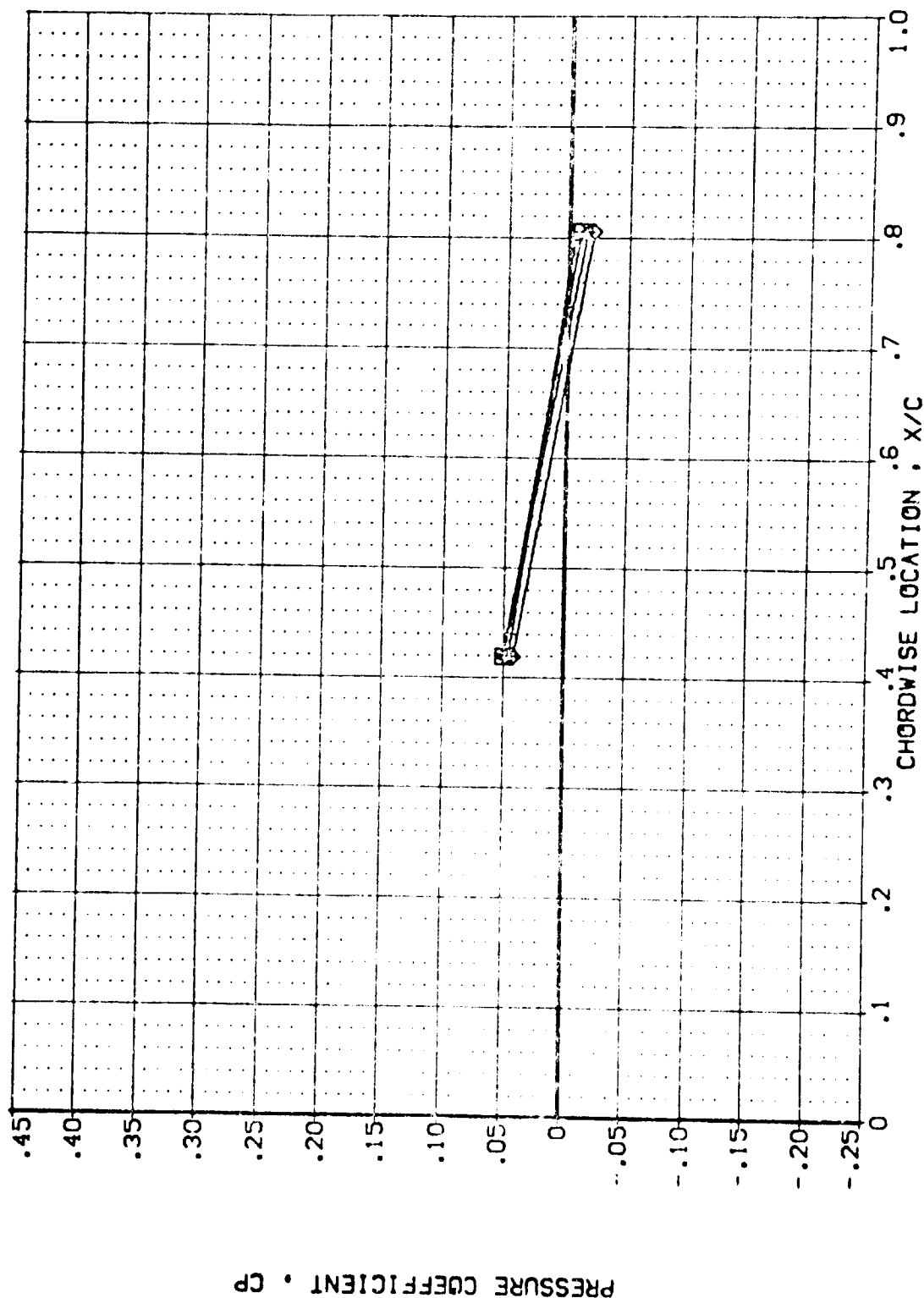
MACH = 3.000 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL

(LBZ008)
(LBZ103)
(LBZ041)
(LBZ008)

CONFIGURATION DESCRIPTION
AMES 87-710 IAL2C OI TI SI LOWER WING PRESSURE
AMES 87-710 IAL2C OI TI SI LOWER WING PRESSURE
AMES 87-710 IAL2C OI TI SI LOWER WING PRESSURE

POWER GPR SRRR GIMBAL
.000 26.860 .768 1.000
1.000 26.860 .768 4.000
1.000 26.860 .768 1.000
1.000 26.860 .768 3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM
MACH = 3.000 ALPHA = 8.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ088)
(LBZ103)
(LBZ041)
(LBZ088)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

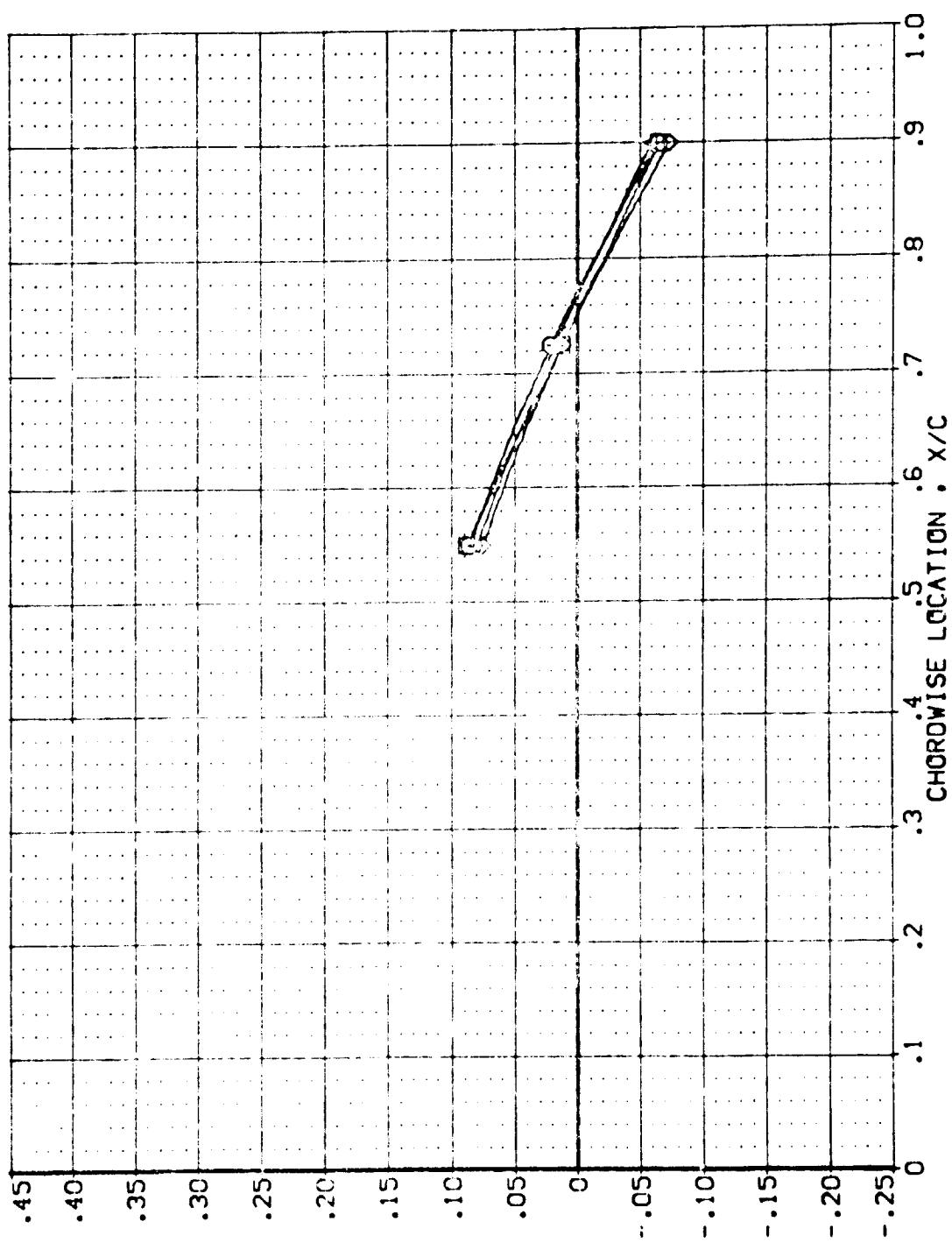
1A12C 01
1A12C 01
1A12C 01
1A12C 01

T1 S1
T1 S1
T1 S1
T1 S1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER DPR SAMPR GIMBAL
.000 26.860 .768 1.000
1.000 26.860 .768 4.000
1.000 26.860 .768 1.000
1.000 26.860 .768 3.000

PRESSURE COEFFICIENT • CP

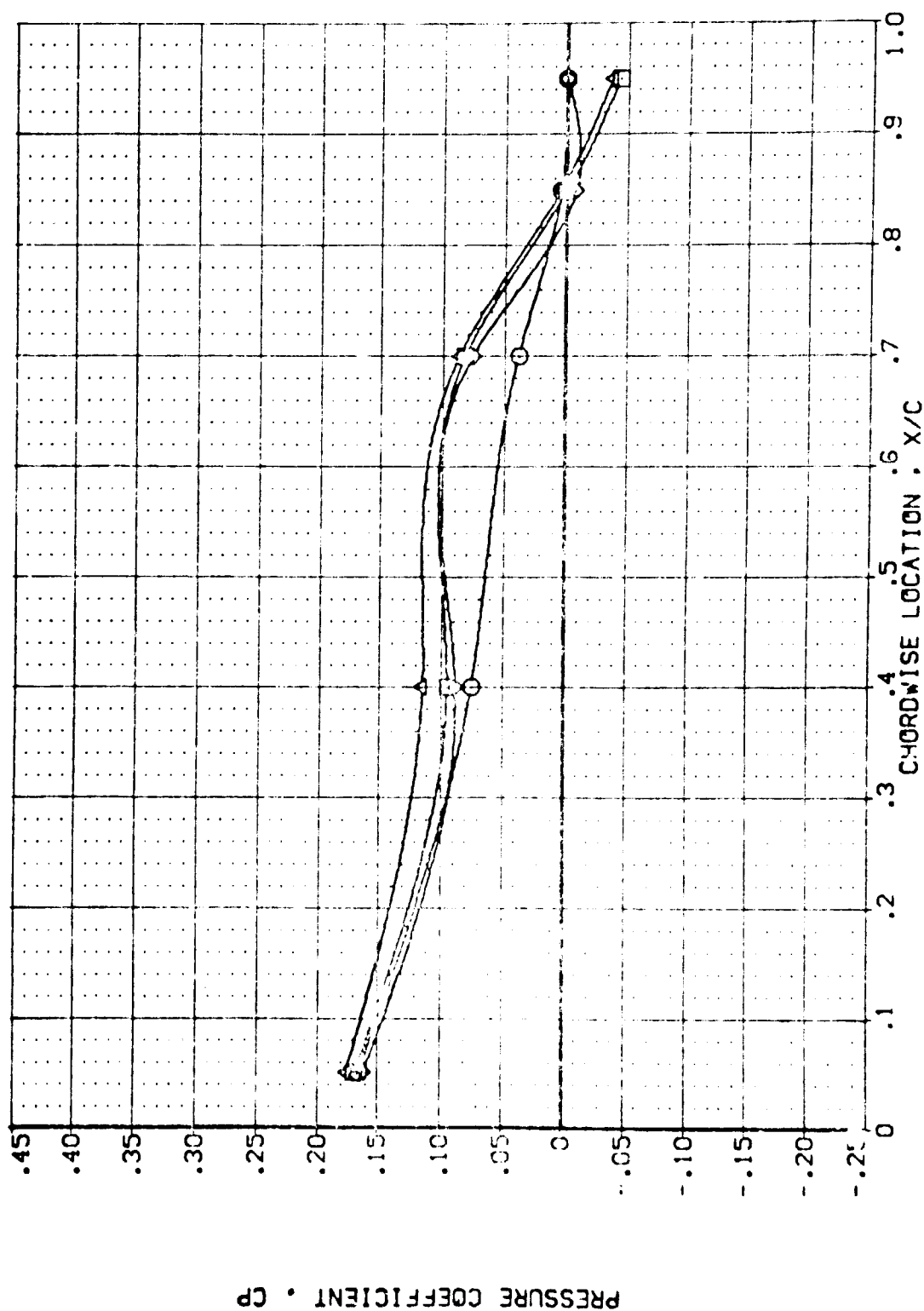


PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER OPR SHPR GIMBAL

(LBZ038)	AMES 87-710	IA12C 01 T1 S1	1.000	26.860	.768	1.000
(LBZ103)	AMES 87-710	IA12C 01 T1 S1	1.000	26.860	.768	1.000
(LBZ041)	AMES 87-710	IA12C 01 T1 S1	1.000	26.860	.768	1.000
(LBZ088)	AMES 87-710	IA12C 01 T1 S1	1.000	26.860	.768	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .673 PAGE 376

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB2008)
(LB2103)
(LB2041)
(LB2068)

AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

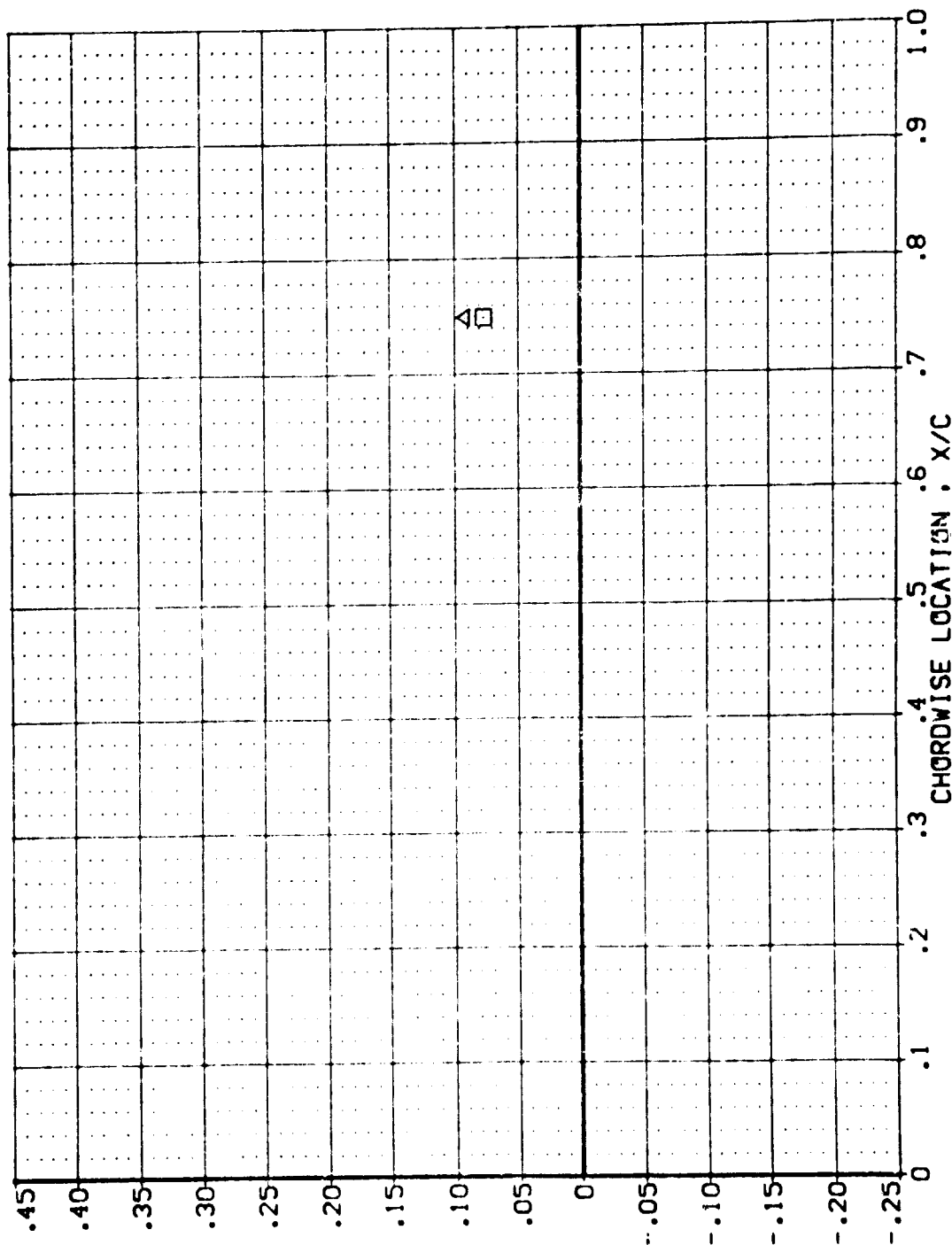
POWER 0.000 26.860
1.000 26.860
1.000 26.860
1.000 26.860

SRPR

GIMBAL

1.000
4.000
1.000
3.000

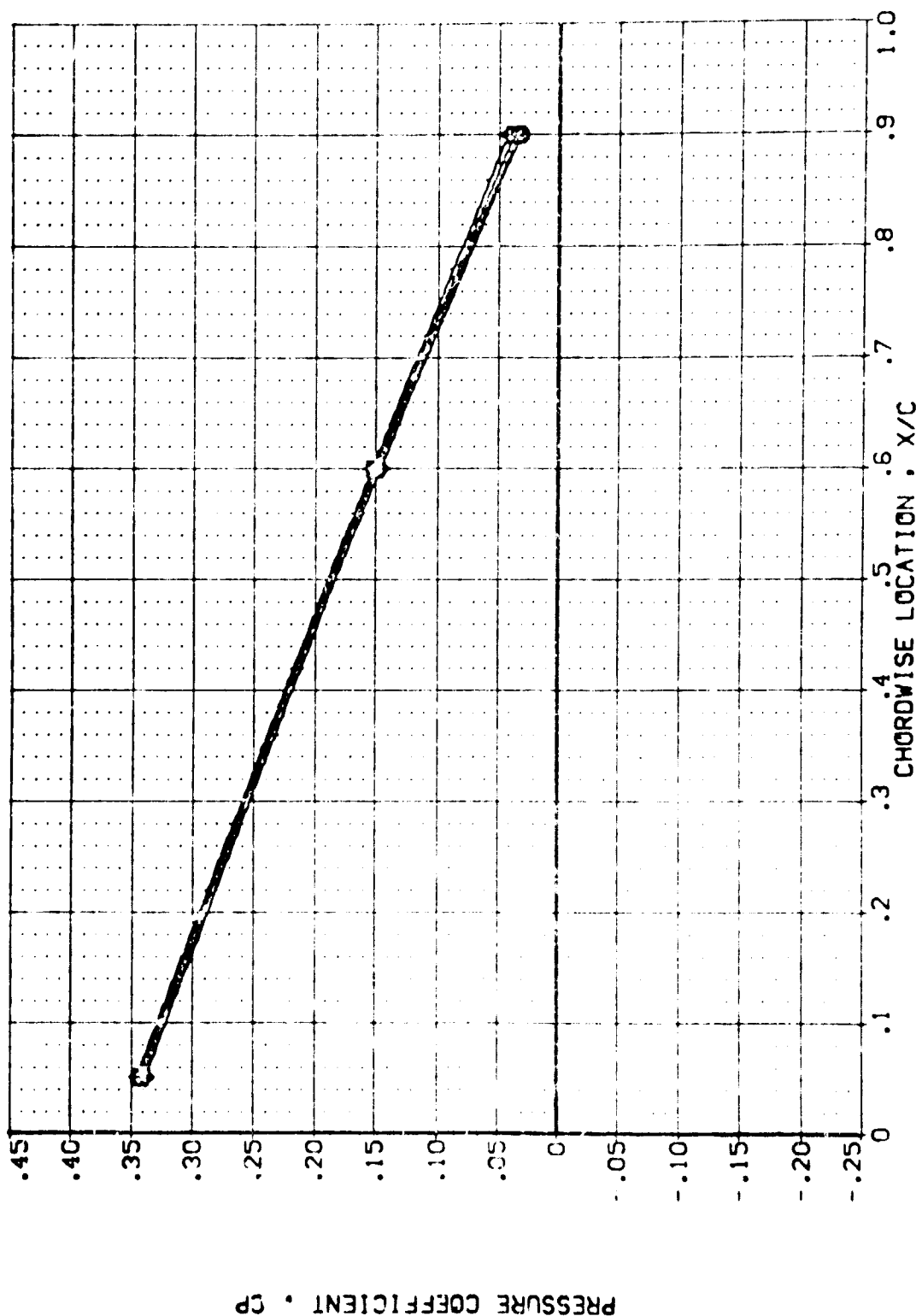
PRESSURE COEFFICIENT, CP



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .780





DATA SET : AMBL	CONFIGURATION DESCRIPTION	POWER	C/R	SR/PR	GIMBAL
(LBZ008)	AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LBZ103)	AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	1.000	26.850	.768	4.000
(LBZ041)	AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	1.000	26.860	.768	1.000
(LBZ088)	AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	1.000	26.860	.768	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .887

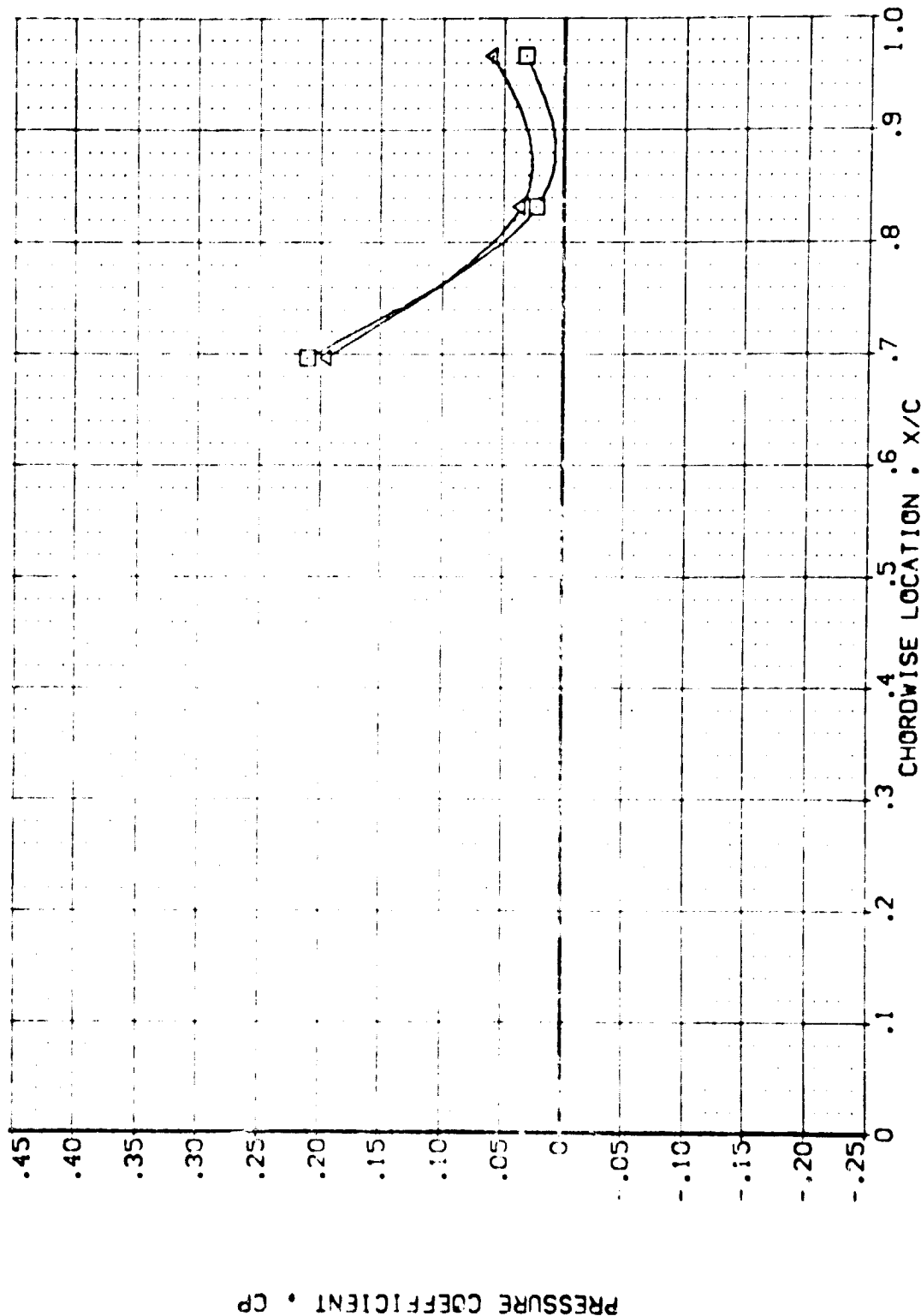
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB2046) 
 (LB2107) 
 (LB2250) 
 (LB2082) 

AMES 87-710 (A) 2C 01 T1 S1 LOWER WING PRESSURE
 AMES 87-710 (A) 2C 01 T1 S1 LOWER WING PRESSURE
 AMES 87-710 (A) 2C 01 T1 S1 LOWER WING PRESSURE
 AMES 87-710 (A) 2C 01 T1 S1 LOWER WING PRESSURE

POWER 1.000
 1.000 23.860
 1.000 23.860
 1.000 23.860

SWPR 1.000
 1.000 4.000
 1.000 1.000
 1.000 3.000



PRESSURE COEFFICIENT, CP

CHORDWISE LOCATION, X/C

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .299

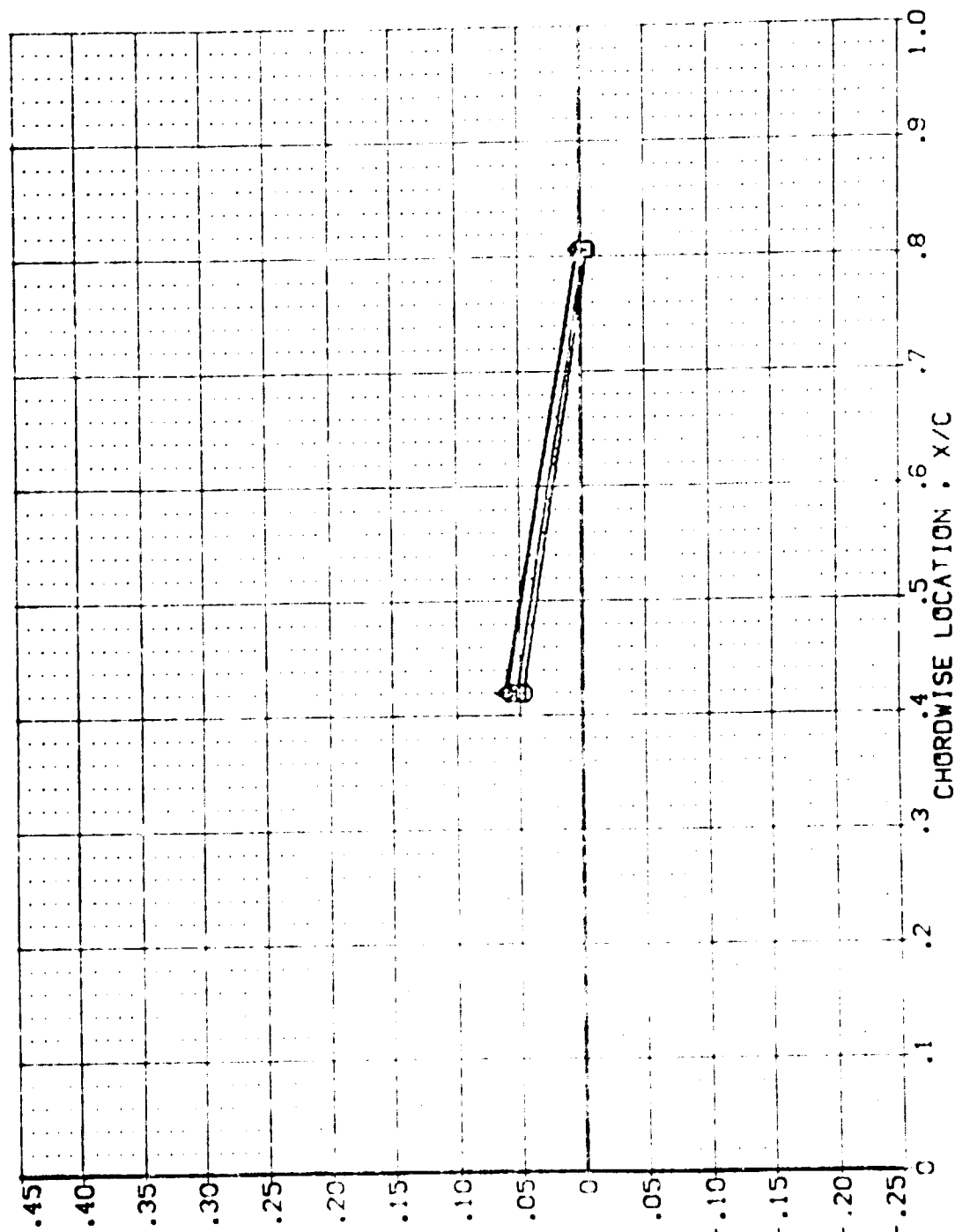
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CTR SUPER GIMBAL

(LB7046)  MES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE 1.00 23.860 .805 1.000

(LB7047)  MES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE 1.00 23.600 .805 1.000

(LB7050)  MES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE 1.00 23.860 .805 1.000

(LB7032)  MES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE 1.00 23.860 .805 1.000

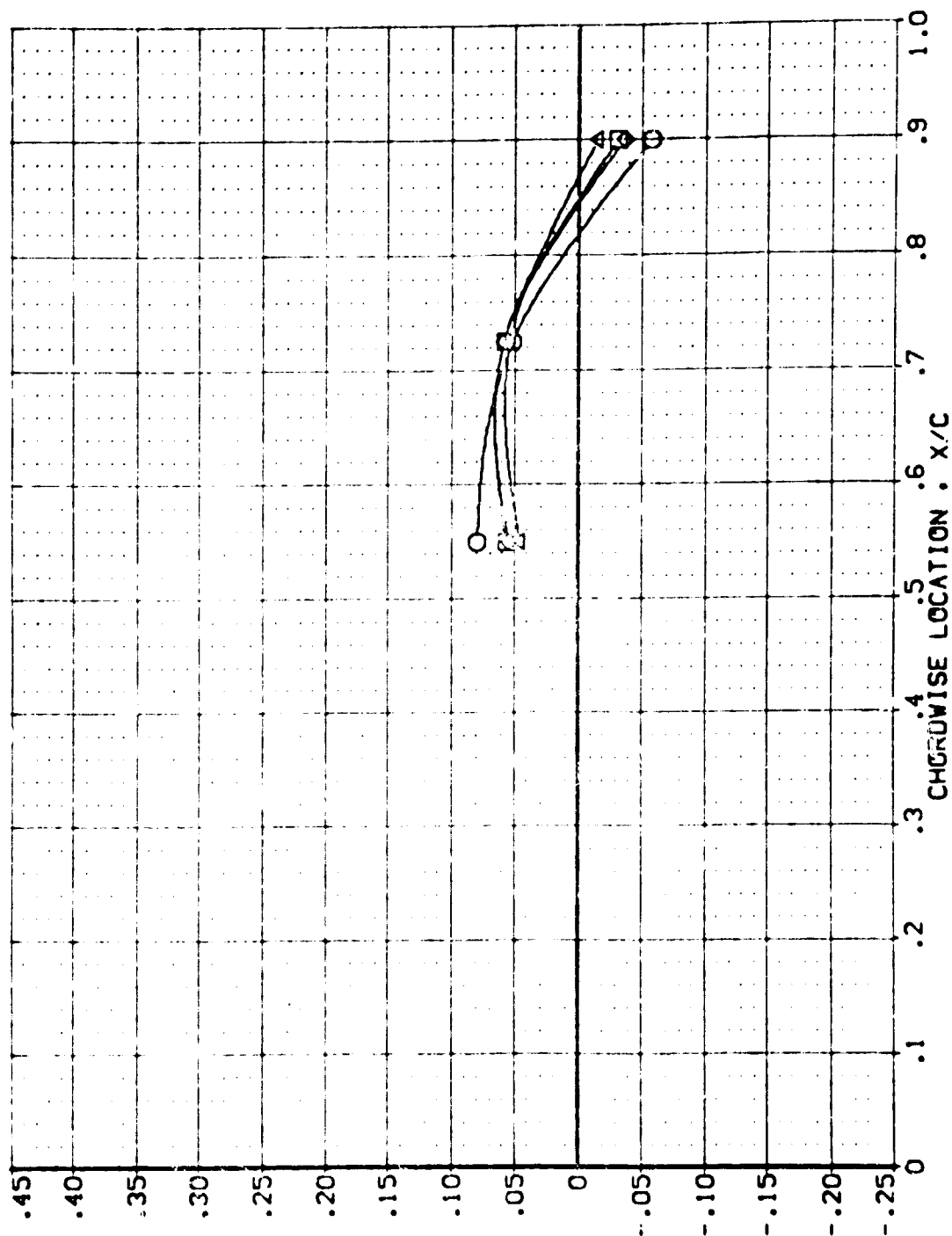


PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .427 PAGE 380

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LB7046) AVES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE
 (LB7107) AVES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE
 (LB7050) AVES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE
 (LB7092) AVES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE

POWER GPR SWPR GIMBAL
 .000 23.860 .826 1.000
 1.000 23.860 .826 4.000
 1.000 23.860 .826 1.000
 1.000 23.860 .826 3.000



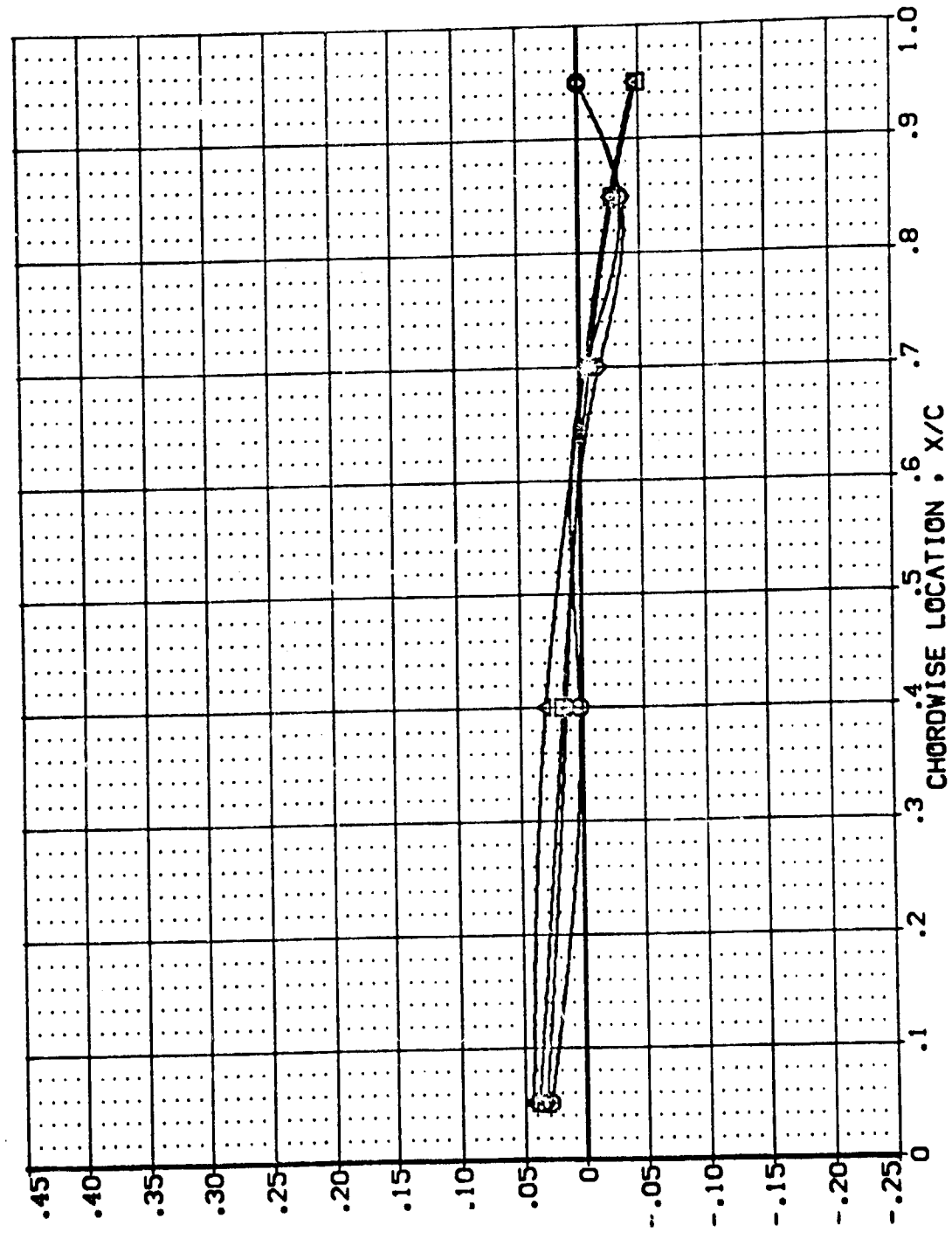
PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .534

28

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZ045) APES 67-710 IAI2C 01 T1 SI LOWER WING PRESSURE
 (LBZ107) APES 67-710 IAI2C 01 T1 SI LOWER WING PRESSURE
 (LBZ050) APES 67-710 IAI2C 01 T1 SI LOWER WING PRESSURE
 (LBZ092) APES 67-710 IAI2C 01 T1 SI LOWER WING PRESSURE

POWER GPR SWPR GIMBAL
 .000 23.860 .826 1.000
 1.000 23.860 .826 4.000
 1.000 23.860 .826 1.000
 1.000 23.860 .826 3.000



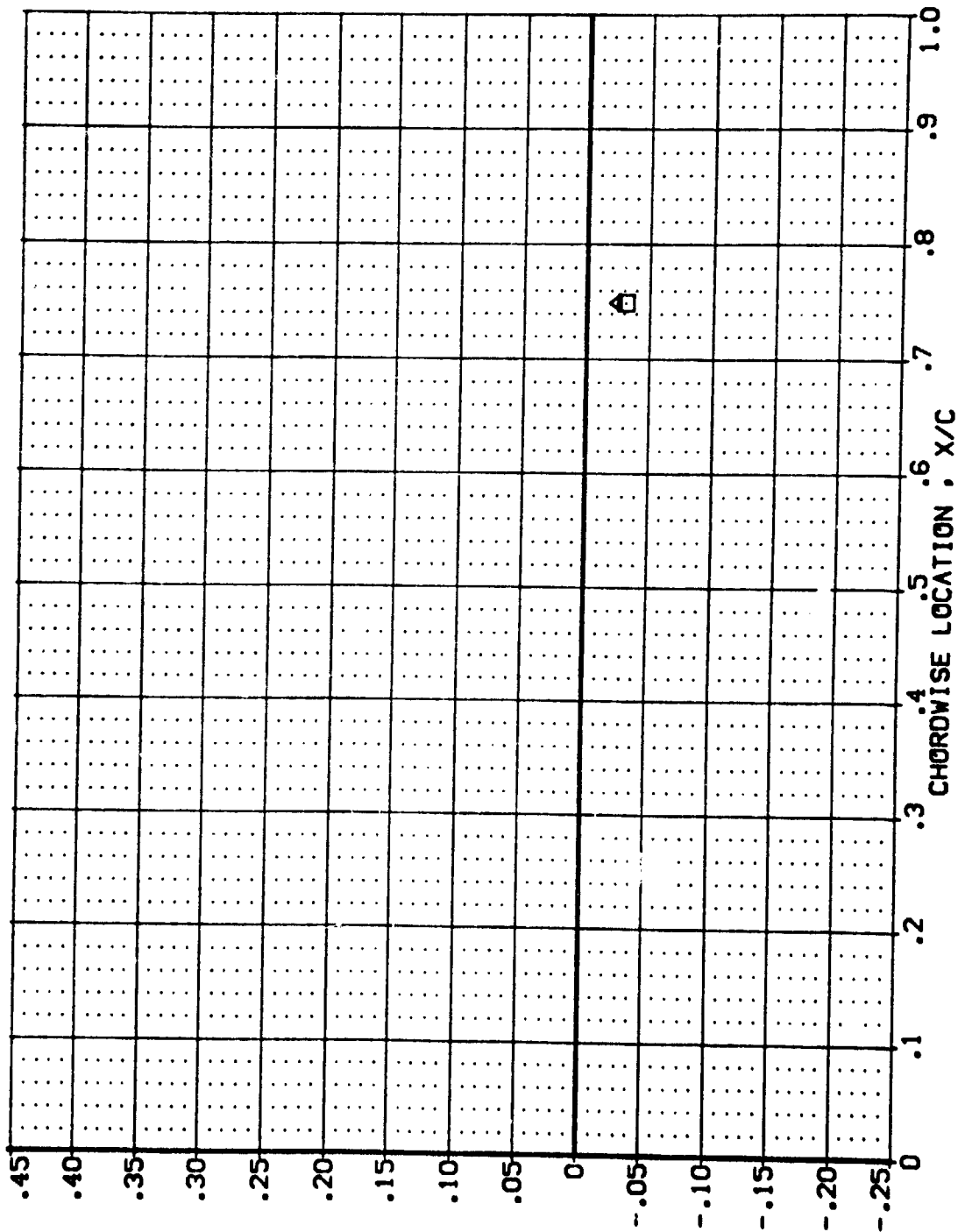
PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .673



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ046)	AVES 87-710	IA12C 01	T1	SI	LOWER WING	PRESSURE	POWER	OPR	SRPR	GIMBAL
(LBZ107)	AVES 87-710	IA12C 01	T1	SI	LOWER WING	PRESSURE	.000	23.860	.826	1.000
(LBZ050)	AVES 87-710	IA12C 01	T1	SI	LOWER WING	PRESSURE	1.000	23.860	.826	4.000
(LBZ052)	AVES 87-710	IA12C 01	T1	SI	LOWER WING	PRESSURE	1.000	23.860	.826	3.000



PRESSURE COEFFICIENT, CP

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .780

DATA SET SYMBOL

(LB2046)
(LB2107)
(LB2050)
(LB2082)

CONFIGURATION DESCRIPTION

AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE

POWER

.000
1.000
1.000
1.000

OPR

23.860
23.860
23.860
23.860

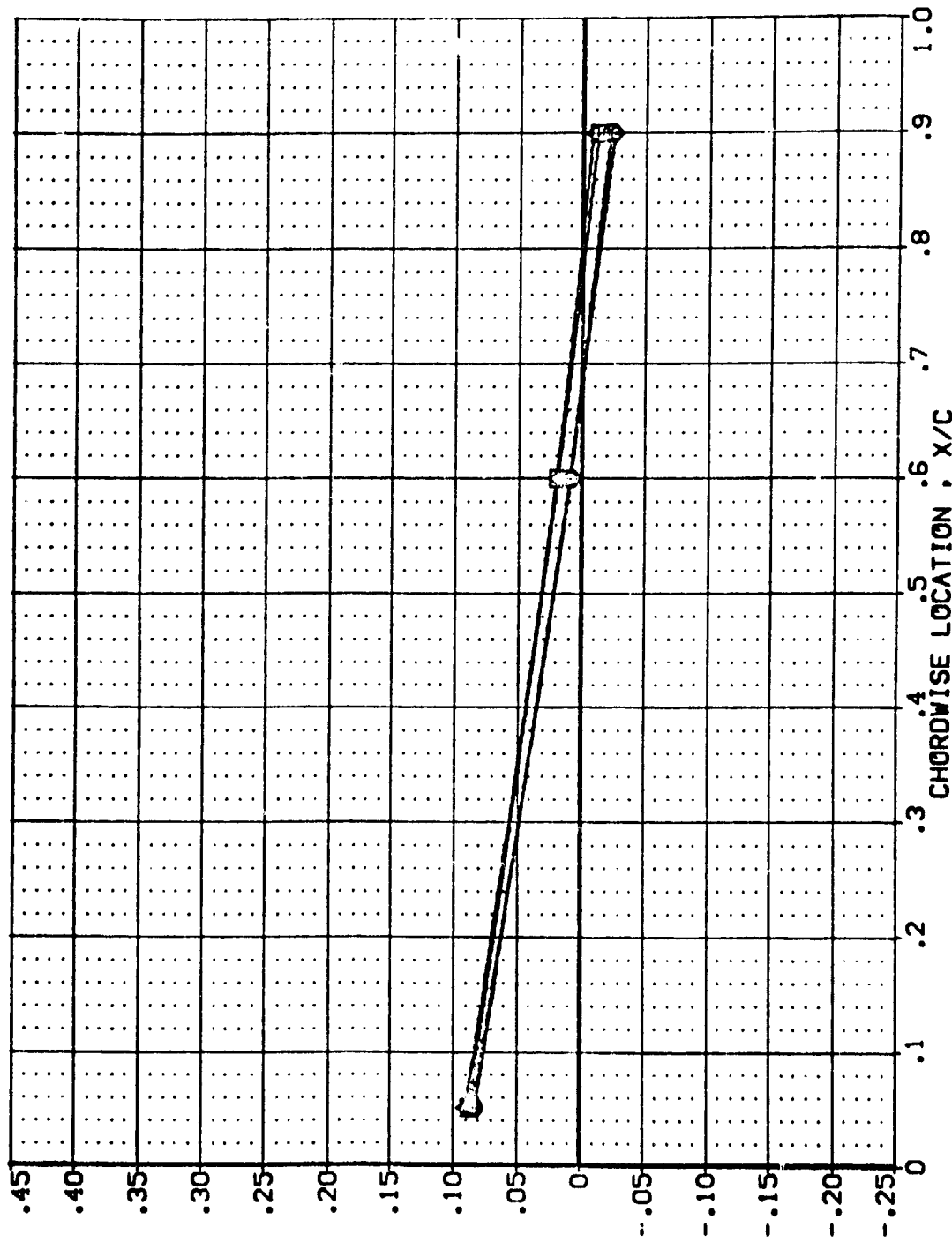
SWPR

.826
.826
.826
.826

GIMBAL

1.000
1.000
1.000
1.000

PRESSURE COEFFICIENT, CP



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZD46)
(LBZ107)
(LBZ050)
(LBZ032)

ANES 07-710
ANES 07-710
ANES 07-710
ANES 07-710

IA12C 01 TI SI
IA12C 01 TI SI
IA12C 01 TI SI
IA12C 01 TI SI

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

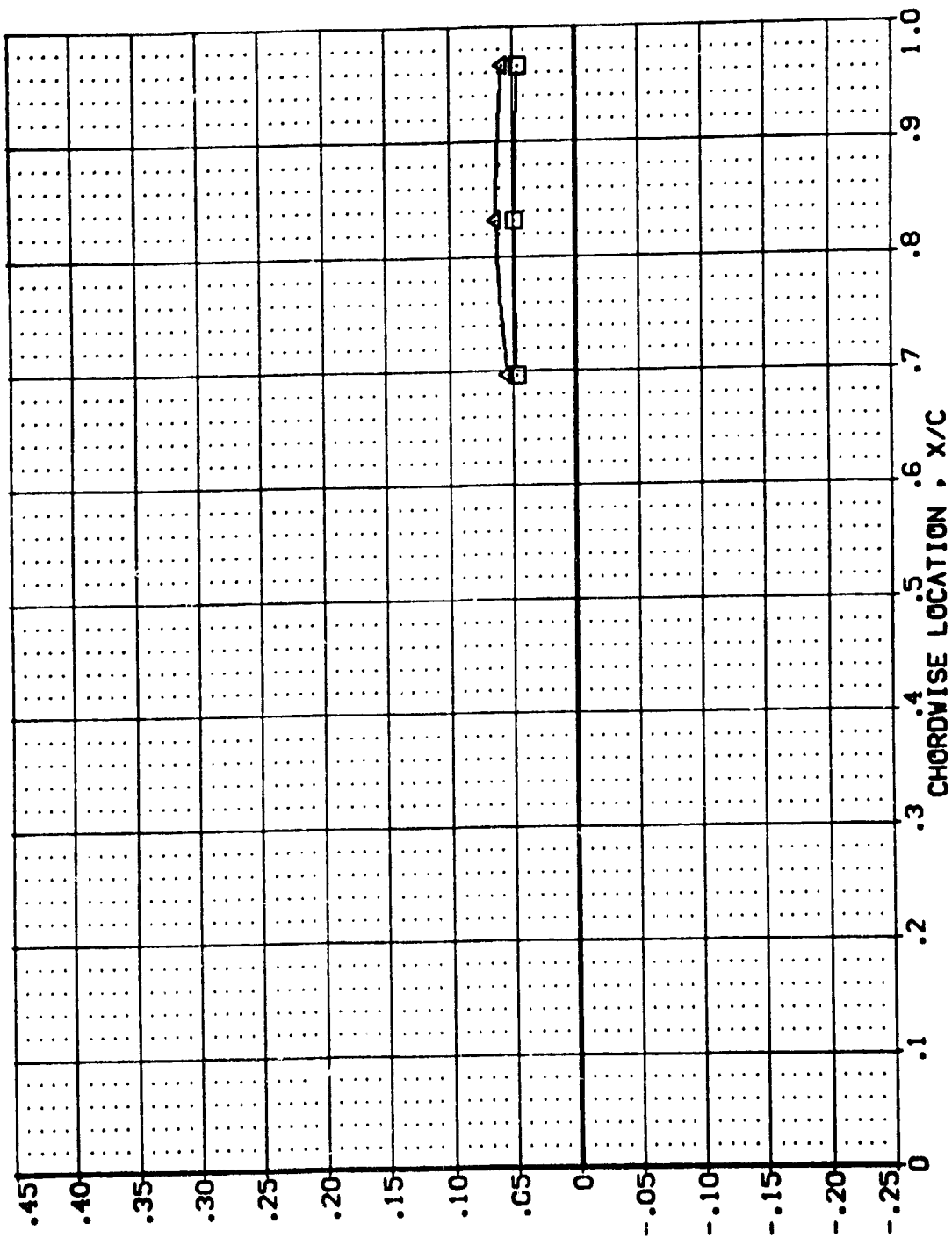
POWER .000
POWER 1.000
POWER 1.000
POWER 1.000

OPR 23.860
OPR 23.860
OPR 23.860
OPR 23.860

SNRPR .826
SNRPR .826
SNRPR .826
SNRPR .826

GIMBAL 1.000
GIMBAL 4.000
GIMBAL 1.000
GIMBAL 3.000

PRESSURE COEFFICIENT - CP

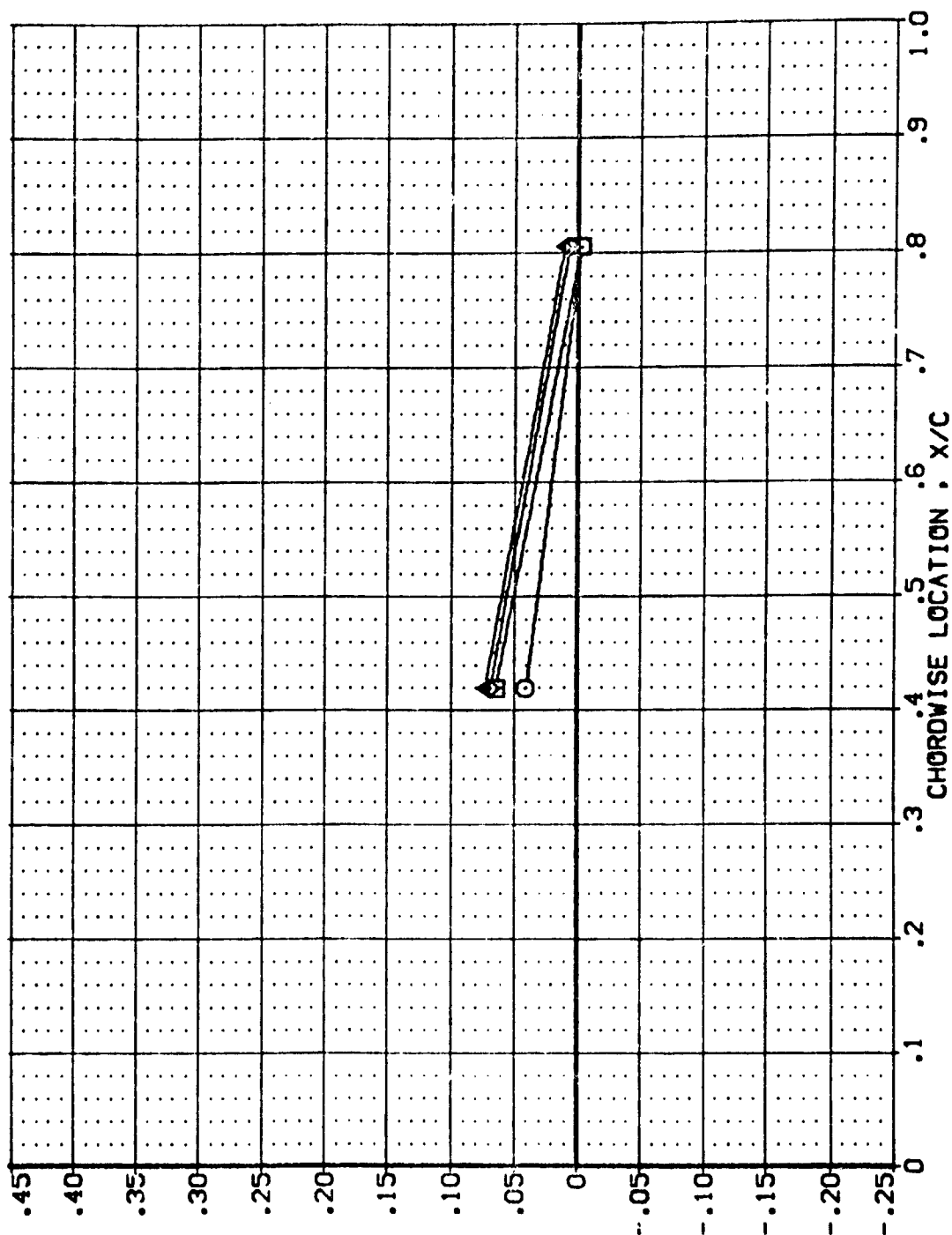


PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZ046) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
 (LBZ107) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
 (LBZ050) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
 (LBZ092) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE

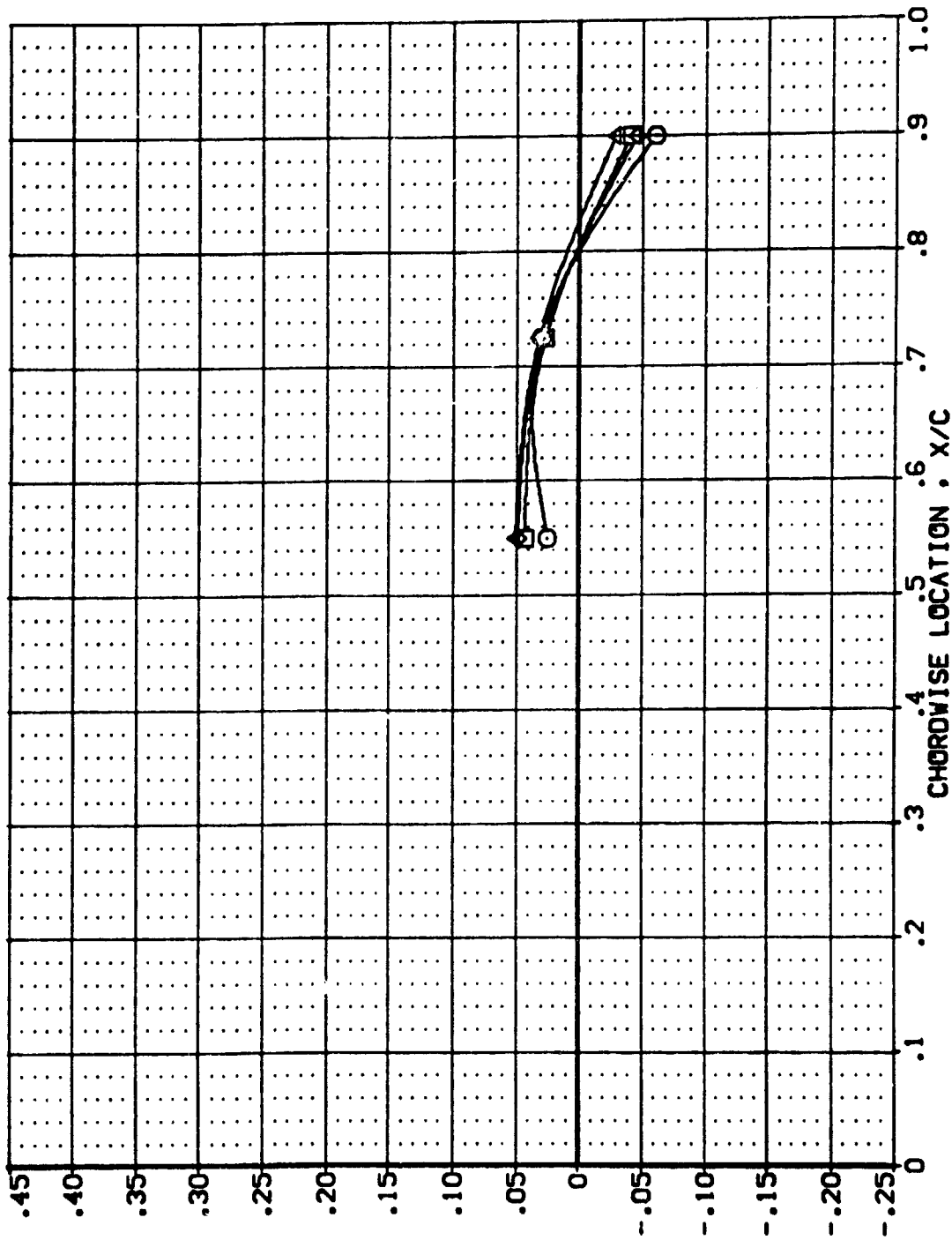
POWER DFR SFRP GIMBAL
 .000 23.850 .826 1.000
 1.000 23.850 .826 4.000
 1.000 23.850 .826 1.000
 1.000 23.850 .826 3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM
 MACH = 3.500 ALPHA = .000 Y/B = .427
 PAGE 386

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CPR	SWPR	GIMBAL
(LBZD45)	AVES 87-710 IAL2C 01 T1 SI LOWER WING PRESSURE	.000	23.860	.826	1.000
(LBZ107)	AVES 87-710 IAL2C 01 T1 SI LOWER WING PRESSURE	1.000	23.860	.826	4.000
(LBZ050)	AVES 87-710 IAL2C 01 T1 SI LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LBZ082)	AVES 87-710 IAL2C 01 T1 SI LOWER WING PRESSURE	1.000	23.860	.826	3.000



PRESSURE COEFFICIENT • CP

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM
MACH = 3.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL
(LB0045)
(LB2107)
(LB2056)
(LB0052)

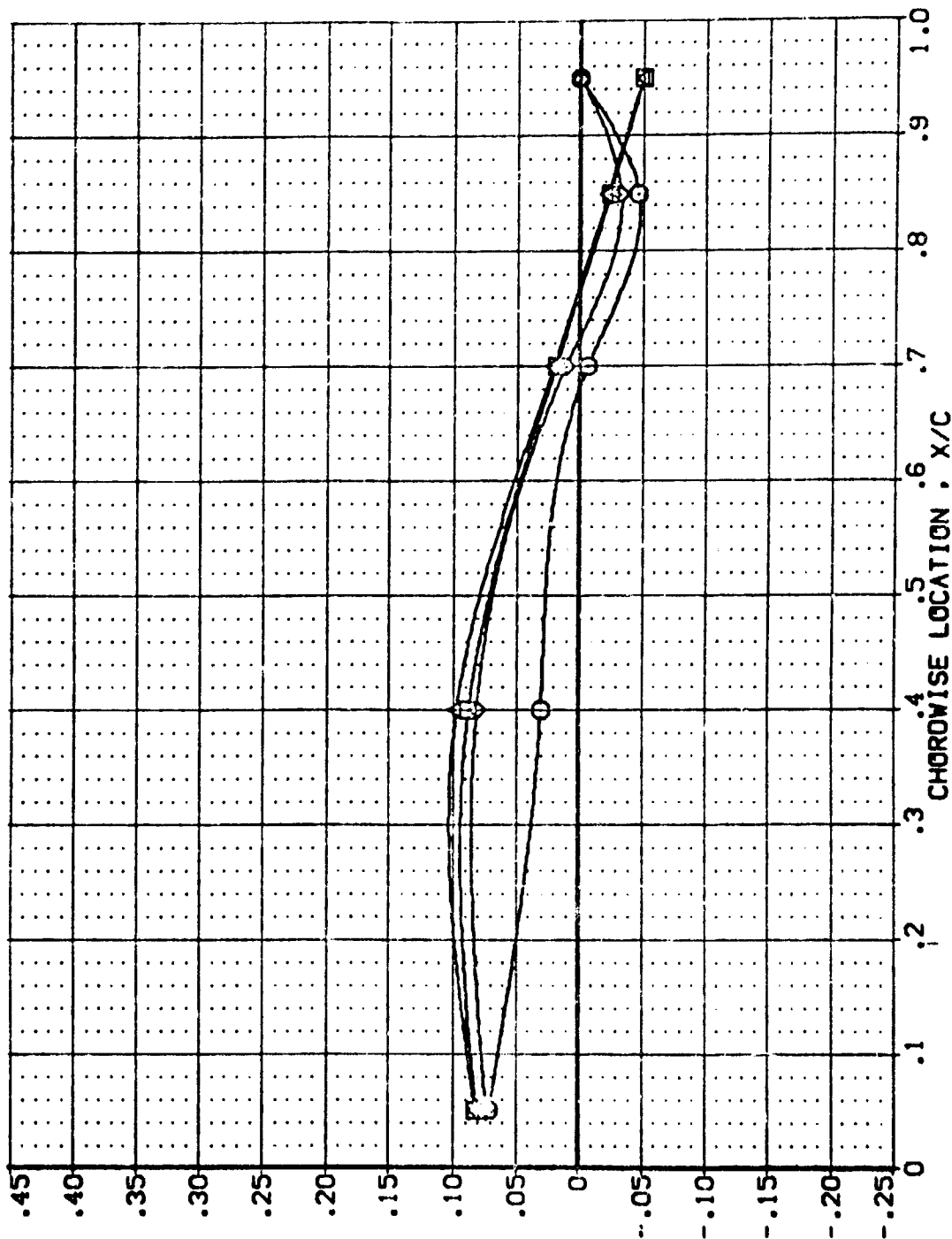
CONFIGURATION DESCRIPTION
AVES 87-710 IALZC 01 T1 S1
AVES 87-710 IALZC 01 T1 S1
AVES 87-710 IALZC 01 T1 S1
AVES 87-710 IALZC 01 T1 S1

POWER
.000
1.000
1.000
1.000

CPR
23.860
23.860
23.860
23.860

SM-PR
.826
.826
.826
.826

GIMBAL
1.000
4.000
1.000
3.000



PRESSURE COEFFICIENT, CP

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .673

PAGE 388

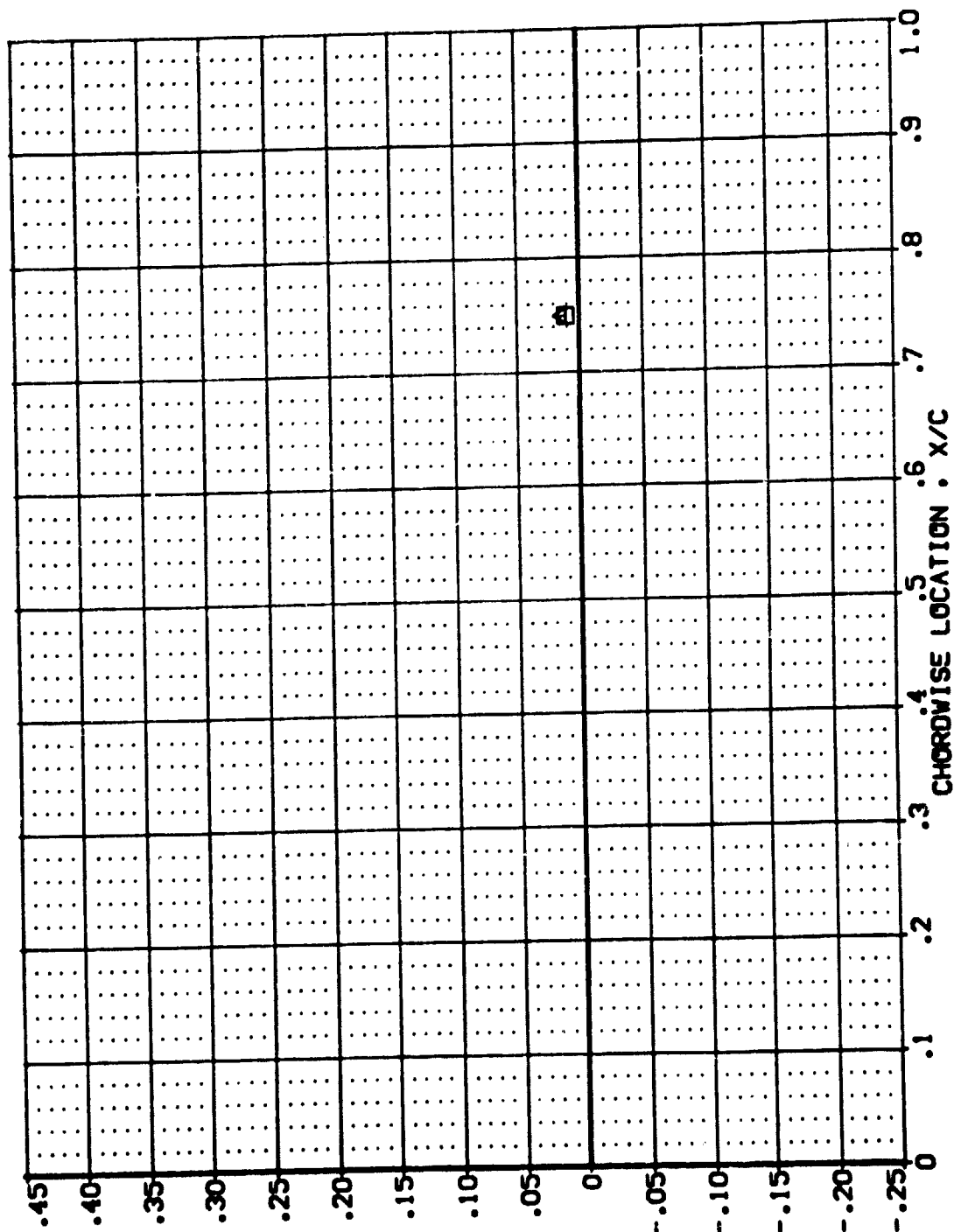
DATA SET 5462L CONFIGURATION DESCRIPTION POWER C/PR S/PFR GIMBAL

(LBZ046) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 23.860 1.000

(LBZ107) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 23.860 1.000

(LBZ050) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 23.860 1.000

(LBZ082) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 23.860 1.000



PRESSURE COEFFICIENT • CP

PLUME A/O NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .780 PAGE 389

DATA SET SYMBOL

(LB00046)
(LB2107)
(LB2050)
(LB2002)

CONFIGURATION DESCRIPTION

AVES 07-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 07-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 07-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 07-710 IAI2C 01 T1 S1 LOWER WING PRESSURE

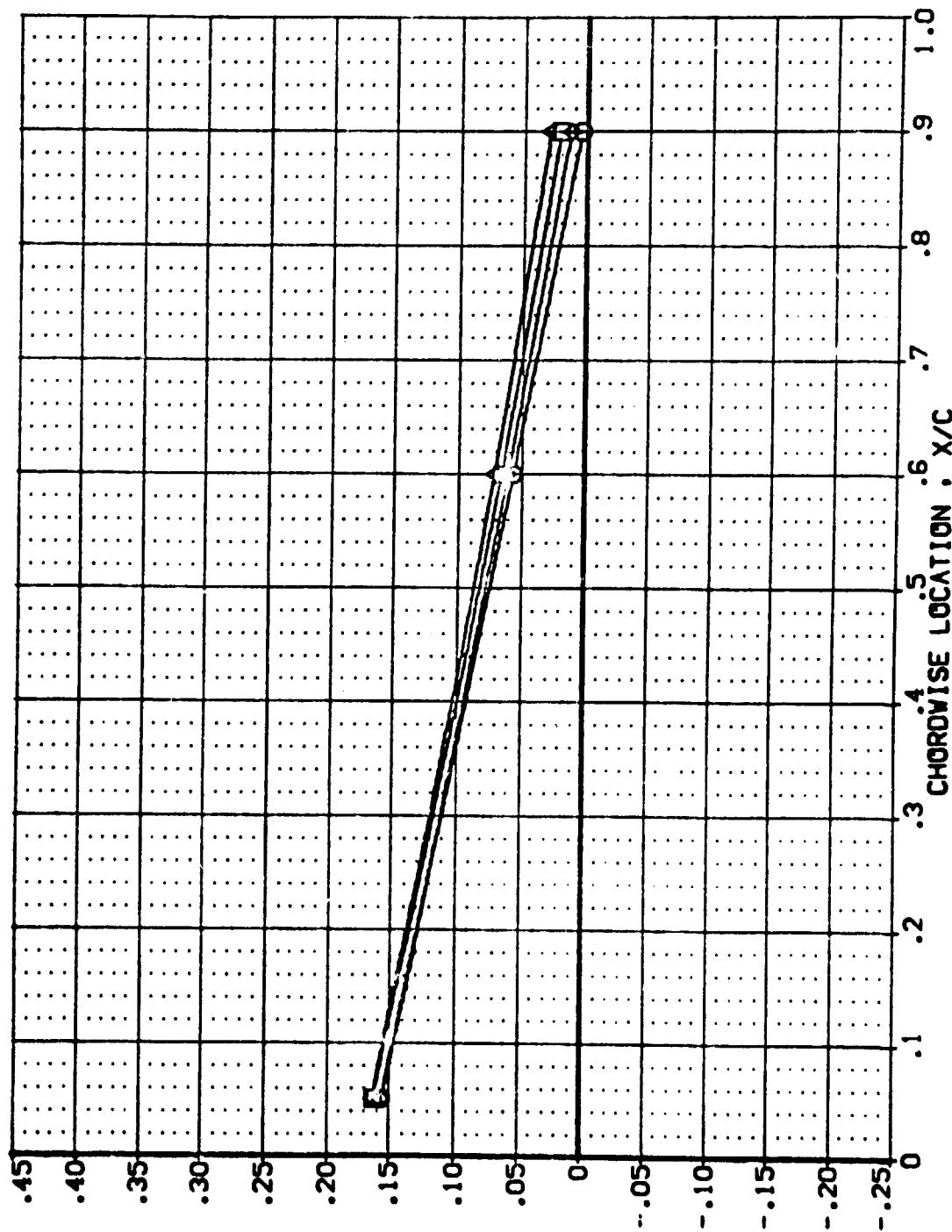
POWER 1.000
1.000
1.000
1.000

GPR 23.860
23.860
23.860
23.860

SPPR .826
.826
.826
.826

GIMBAL 1.000
4.000
1.000
3.000

PRESSURE COEFFICIENT • CP

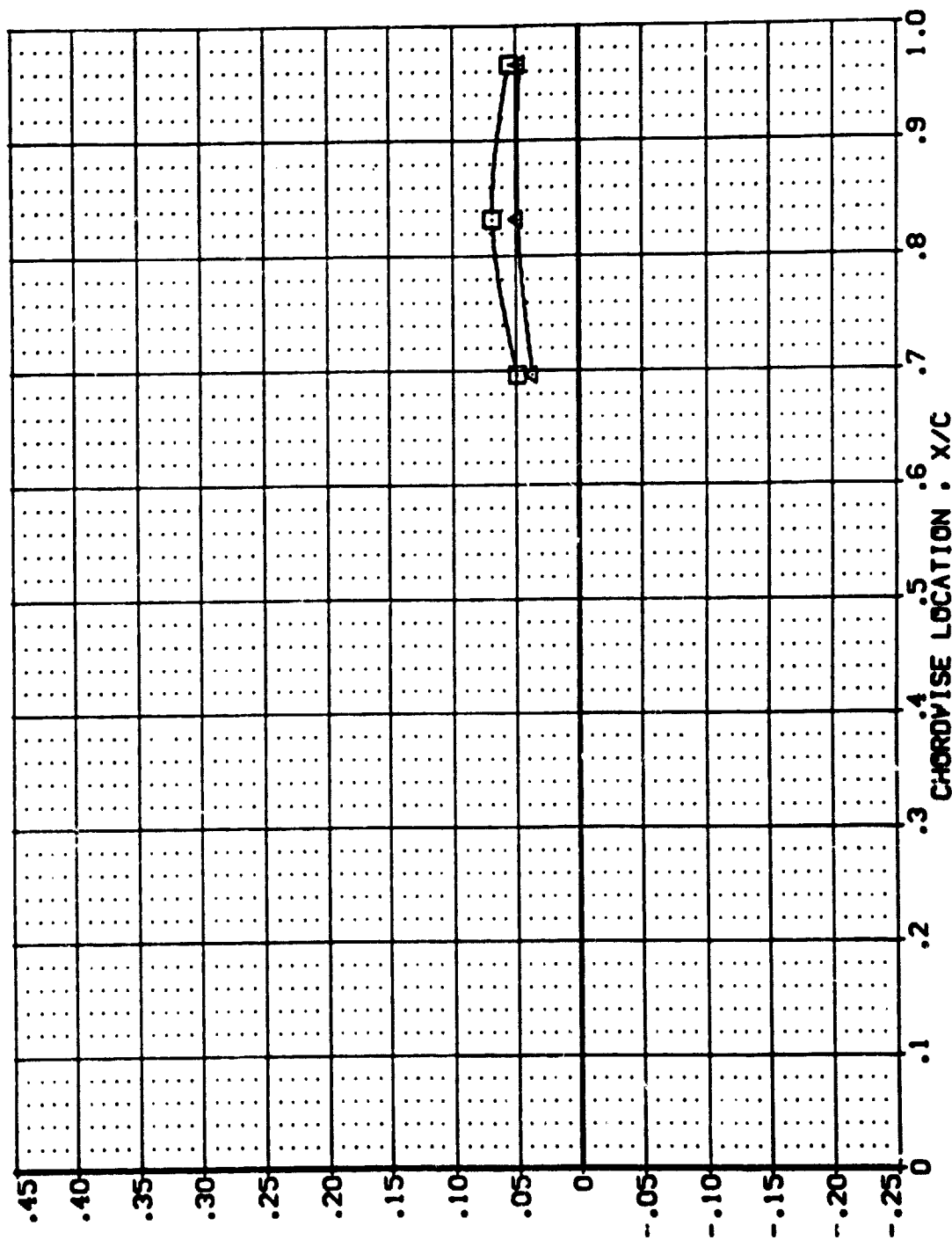


PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZ045) ASES 67-710 IAI ZC 01 Y1 SI LOWER WING PRESSURE
 (LBZ107) ASES 67-710 IAI ZC 01 Y1 SI LOWER WING PRESSURE
 (LBZ050) ASES 67-710 IAI ZC 01 Y1 SI LOWER WING PRESSURE
 (LBZ052) ASES 67-710 IAI ZC 01 Y1 SI LOWER WING PRESSURE

POWER C/PR SWPR GIMBAL
 .000 23.660 .826 1.000
 1.000 23.660 .826 4.000
 1.000 23.660 .826 3.000



PRESSURE COEFFICIENT • CP

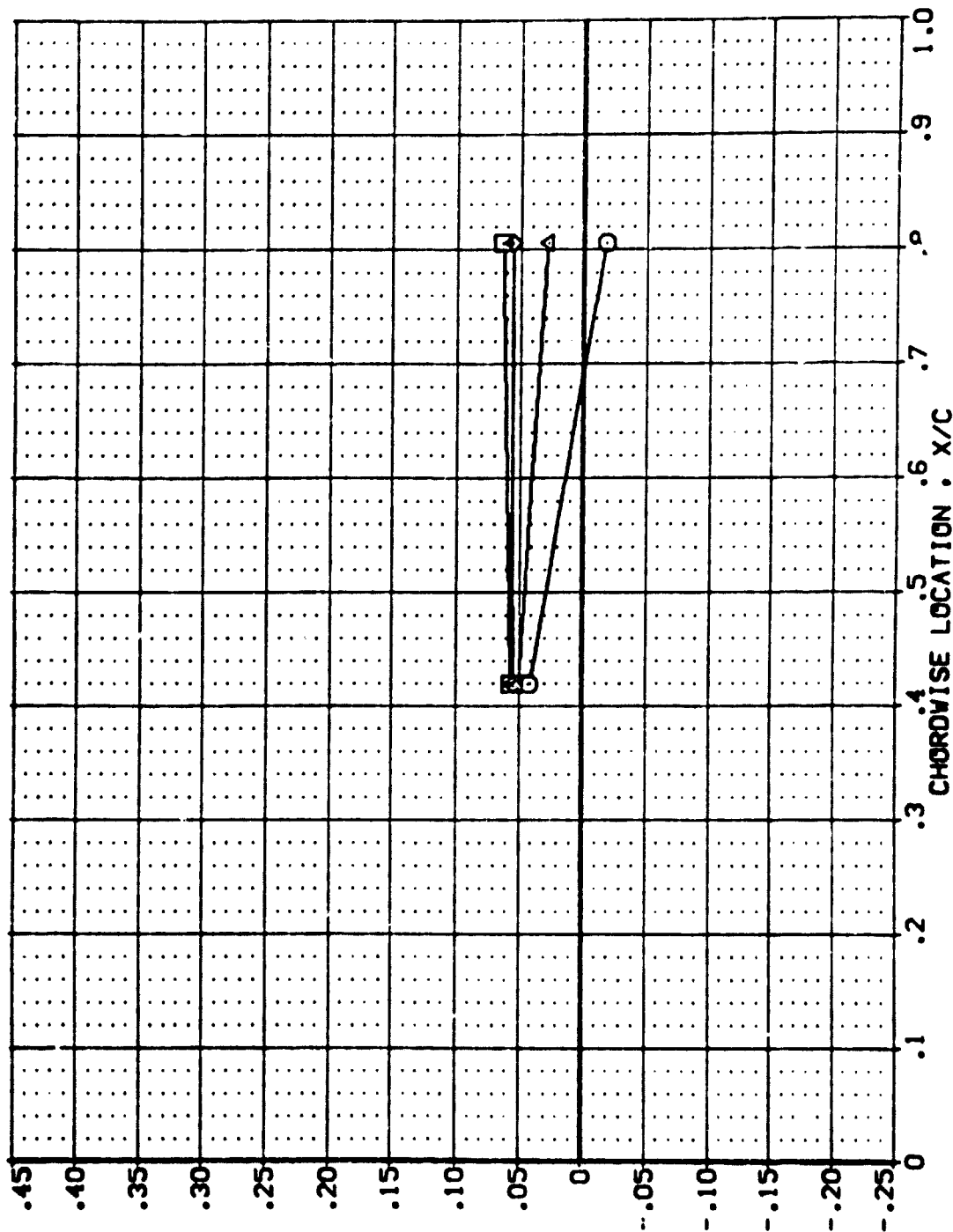
PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL
(LBZ045)
(LBZ107)
(LBZ050)
(LBZ052)

CONFIGURATION DESCRIPTION
AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE

POWER QPR 0.000 23.860
SPR 1.000 23.860
GIMBAL 1.000 1.000
1.000 1.000
1.000 1.000



PRESSURE COEFFICIENT • CP

PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .427

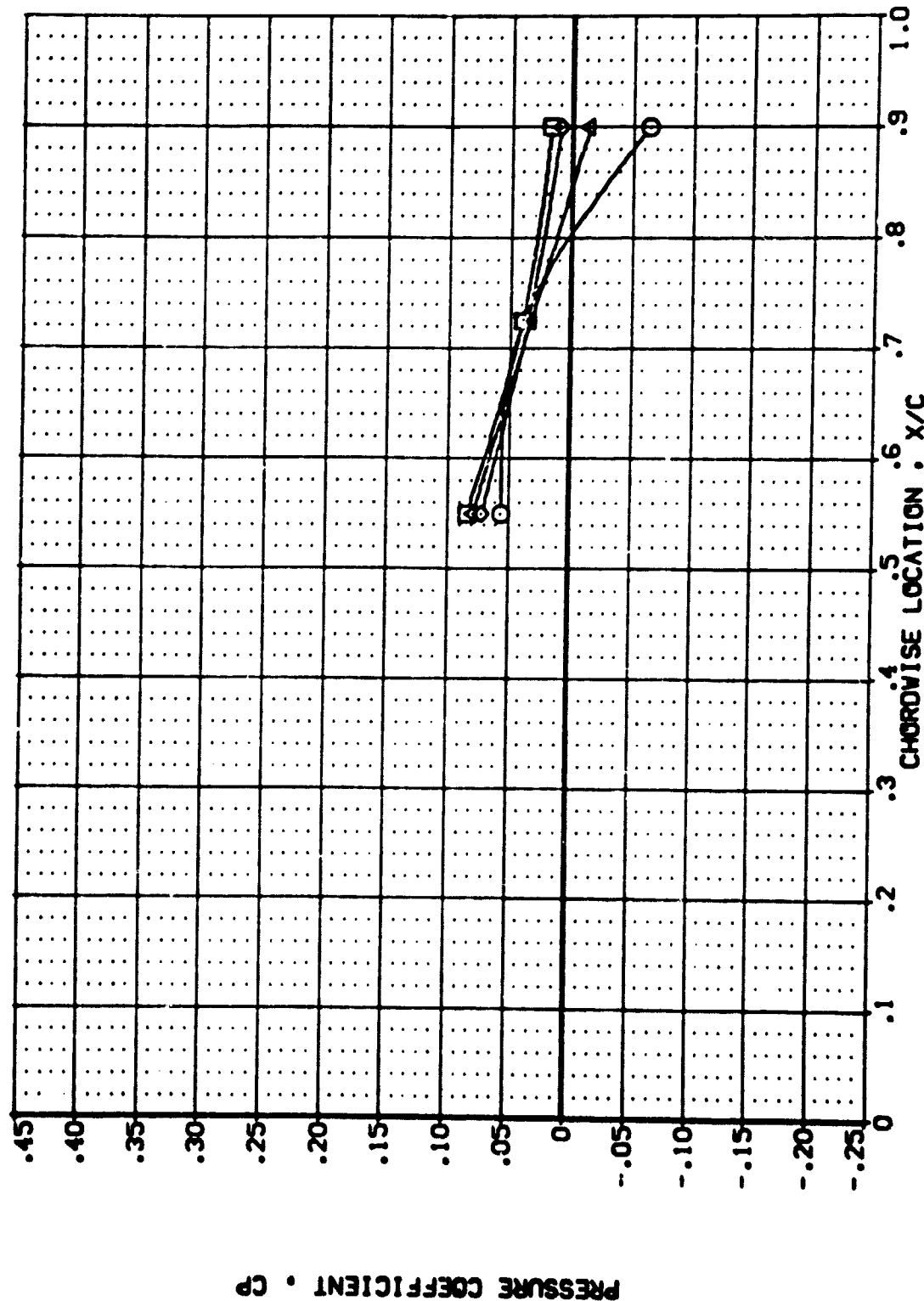
PAGE 392

DATA SET NAME: CONFIGURATION DESCRIPTION

(LIB0046) (LIB0107) (LIB0200) (LIB0202)

AVES 87-710 |A|ZC 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 |A|ZC 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 |A|ZC 01 T1 S1 LOWER WING PRESSURE

POWER 0.000 1.000 1.000 1.000
GWR 23.860 23.860 23.860 23.860
SWPR .828 .828 .828 .828
GIMBAL 1.000 1.000 1.000 3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM
MACH = 3.500 ALPHA = 8.000 Y/B = .534
PAGE 393

DATA SET SYMBOL

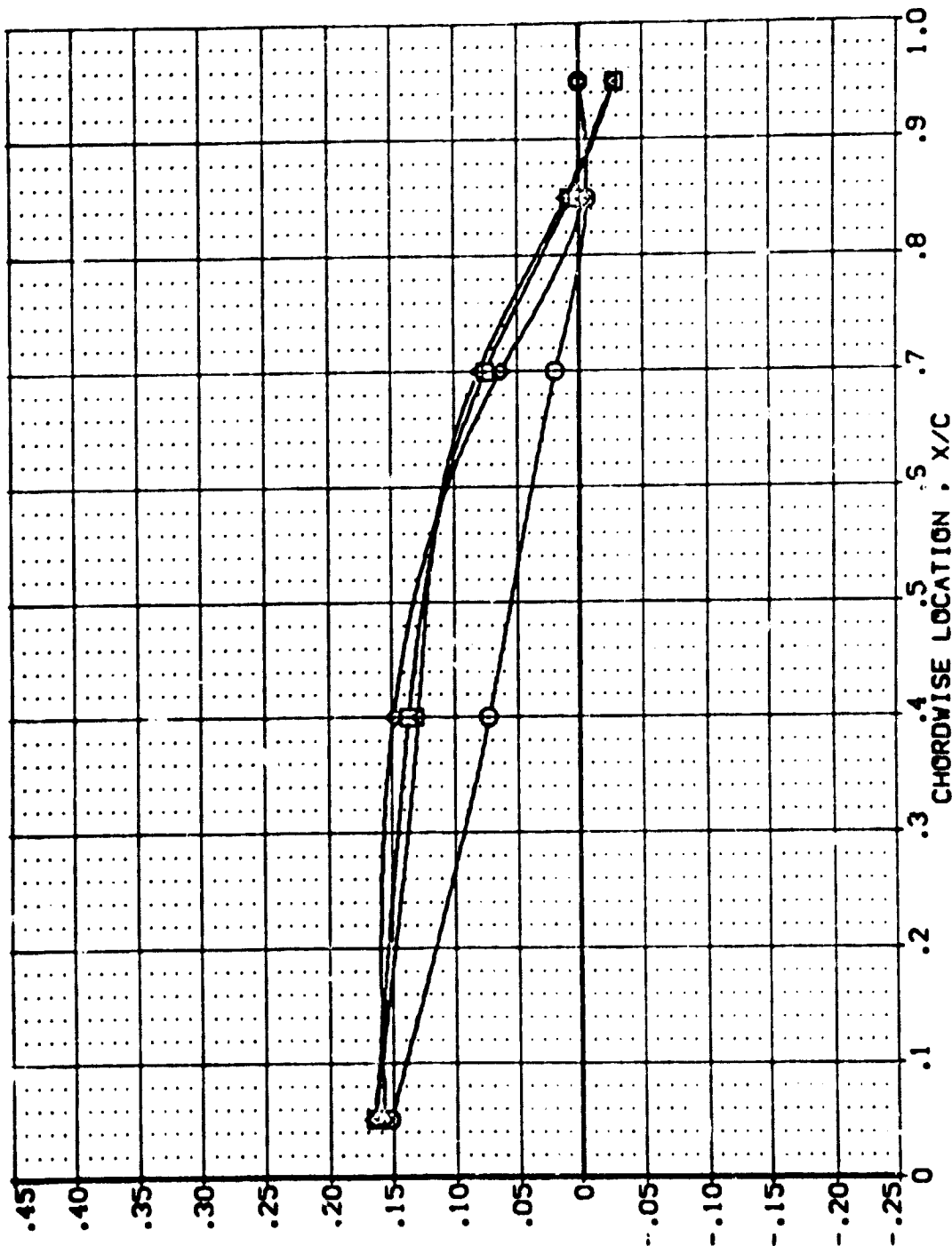
(L02045)
(L02107)
(L02150)
(L02202)

CONFIGURATION DESCRIPTION

AVES 07-710 IAI 2C 01 TI S1 LOWER WING PRESSURE
AVES 07-710 IAI 2C 01 TI S1 LOWER WING PRESSURE
AVES 07-710 IAI 2C 01 TI S1 LOWER WING PRESSURE
AVES 07-710 IAI 2C 01 TI S1 LOWER WING PRESSURE

POWER GPR SWPR GIMBAL
.000 23.450 .826 1.000
1.000 23.600 .826 1.000
1.000 23.600 .826 3.000

PRESSURE COEFFICIENT • CP



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .673

PAGE 394

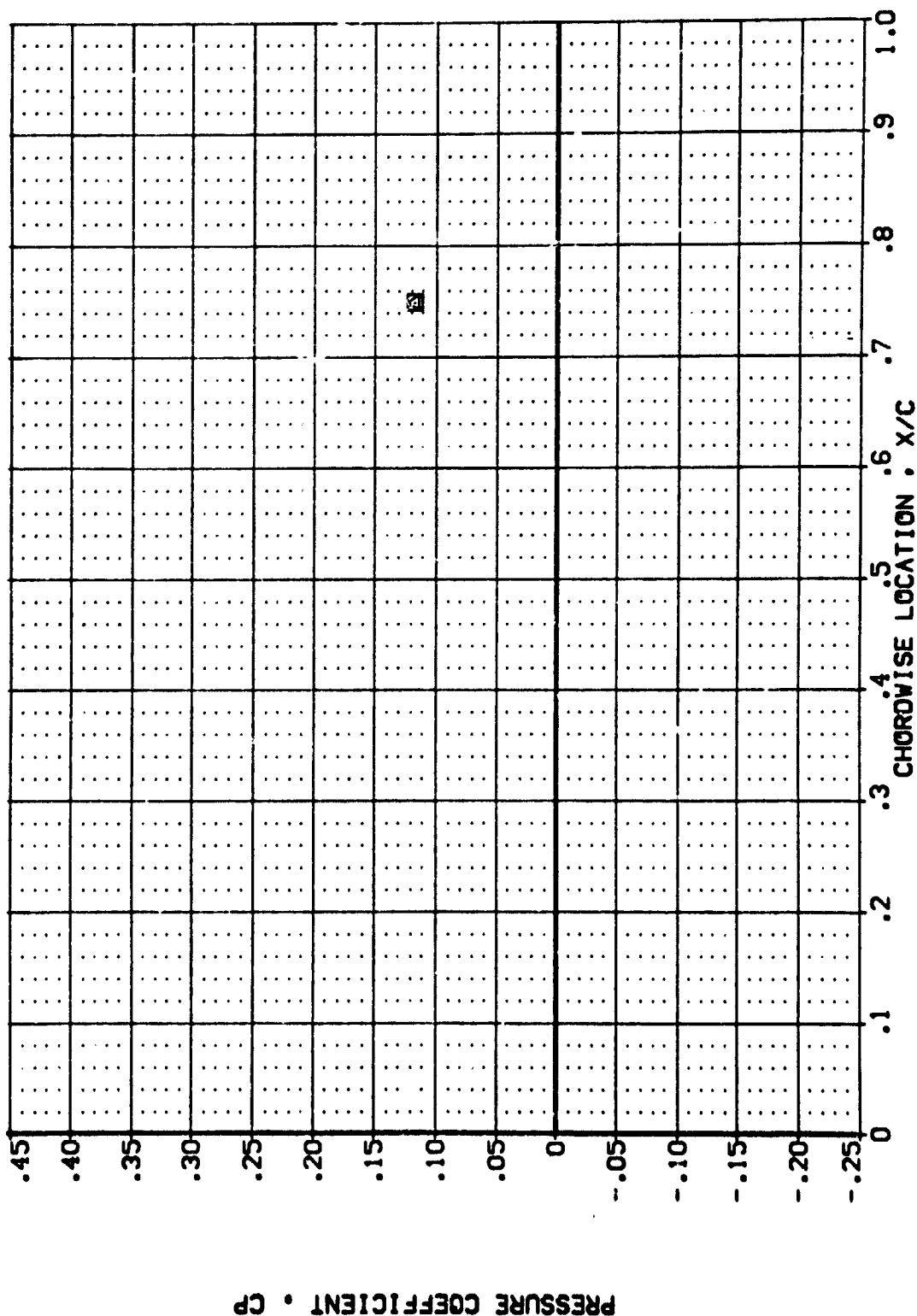
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/N/P GIMBAL

{LBZD46} AYES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE .000 23.850 1.000 1.000

{LBZD47} AYES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE 1.000 23.850 .826 4.000

{LBZD50} AYES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE 1.000 23.850 .826 1.000

{LBZD82} AYES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE 1.000 23.850 .826 3.000

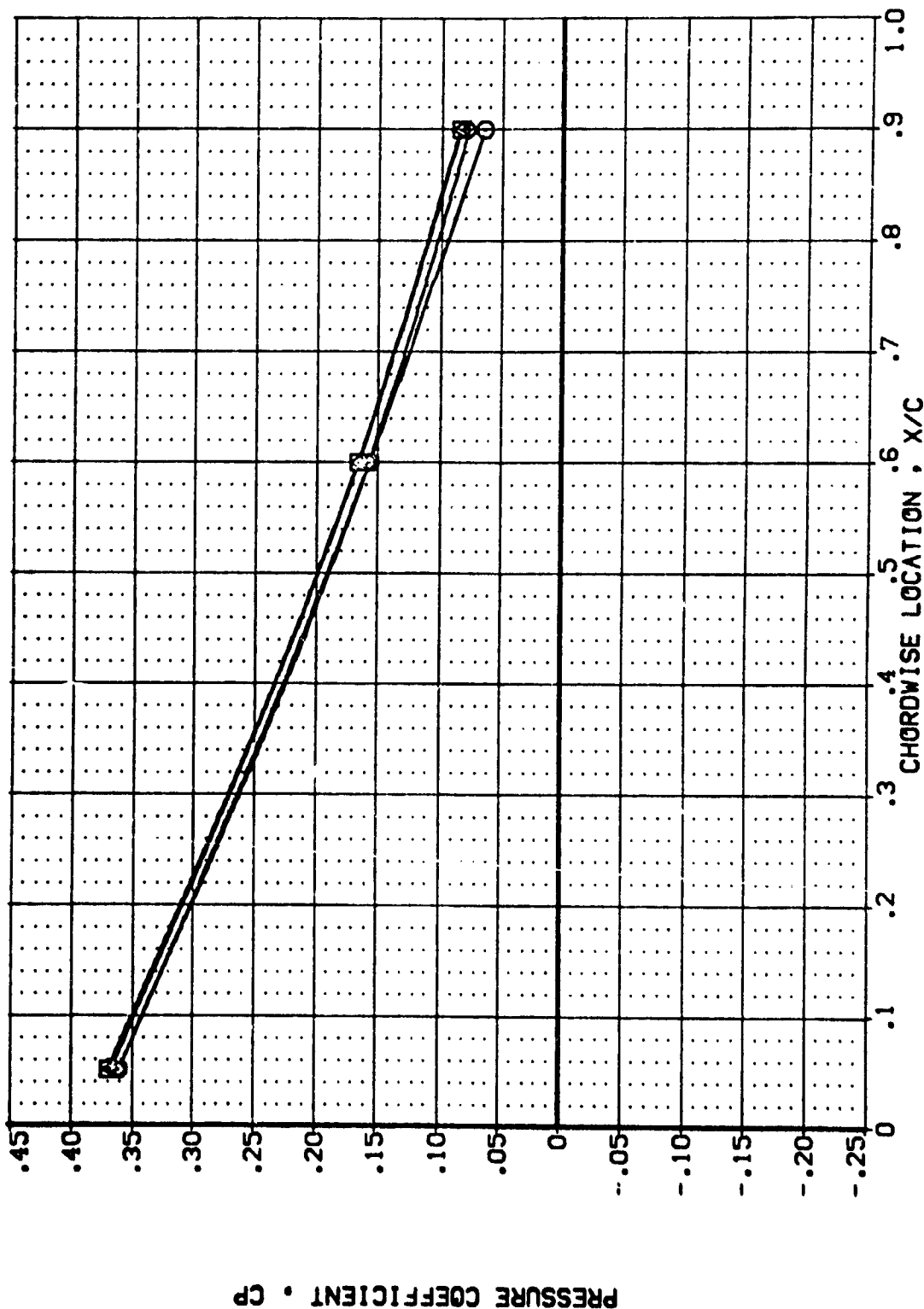


PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZD46)	AVES 87-710	IA12C	01	TI	SI	LOWER WING PRESSURE	POWER	QPR	SDPR	GIMBAL
(LBZ107)	AVES 87-710	IA12C	01	TI	SI	LOWER WING PRESSURE	.000	23.860	.826	1.000
(LBZD50)	AVES 87-710	IA12C	01	TI	SI	LOWER WING PRESSURE	1.000	23.860	.826	4.000
(LBZD92)	AVES 87-710	IA12C	01	TI	SI	LOWER WING PRESSURE	1.000	23.860	.826	3.000



PLUME AND NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

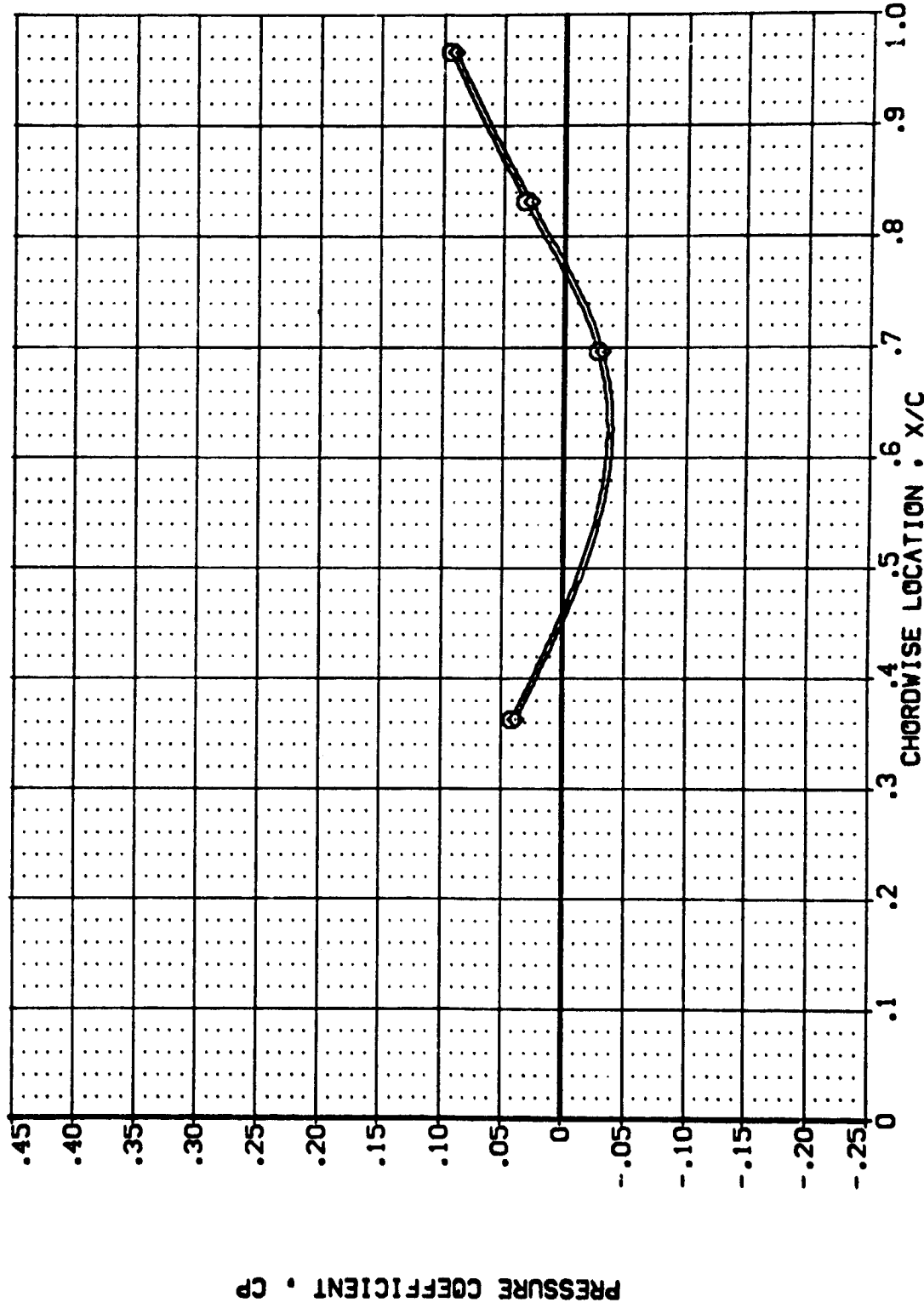
MACH = 3.500 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZD037)
(LBZD037)
(LBZD039)

AVES 87-710 IAI2C 01 TI SI UPPER WING PRESSURE
AVES 87-710 IAI2C 01 TI SI UPPER WING PRESSURE
AVES 87-710 IAI2C 01 TI SI UPPER WING PRESSURE

POWER .000
GPR .000
3PRR .000
GIMBAL 4.000
1.000
3.000



PRESSURE COEFFICIENT, CP

CHORDWISE LOCATION, X/C

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ087)
(LBZ087)
(LBZ087)

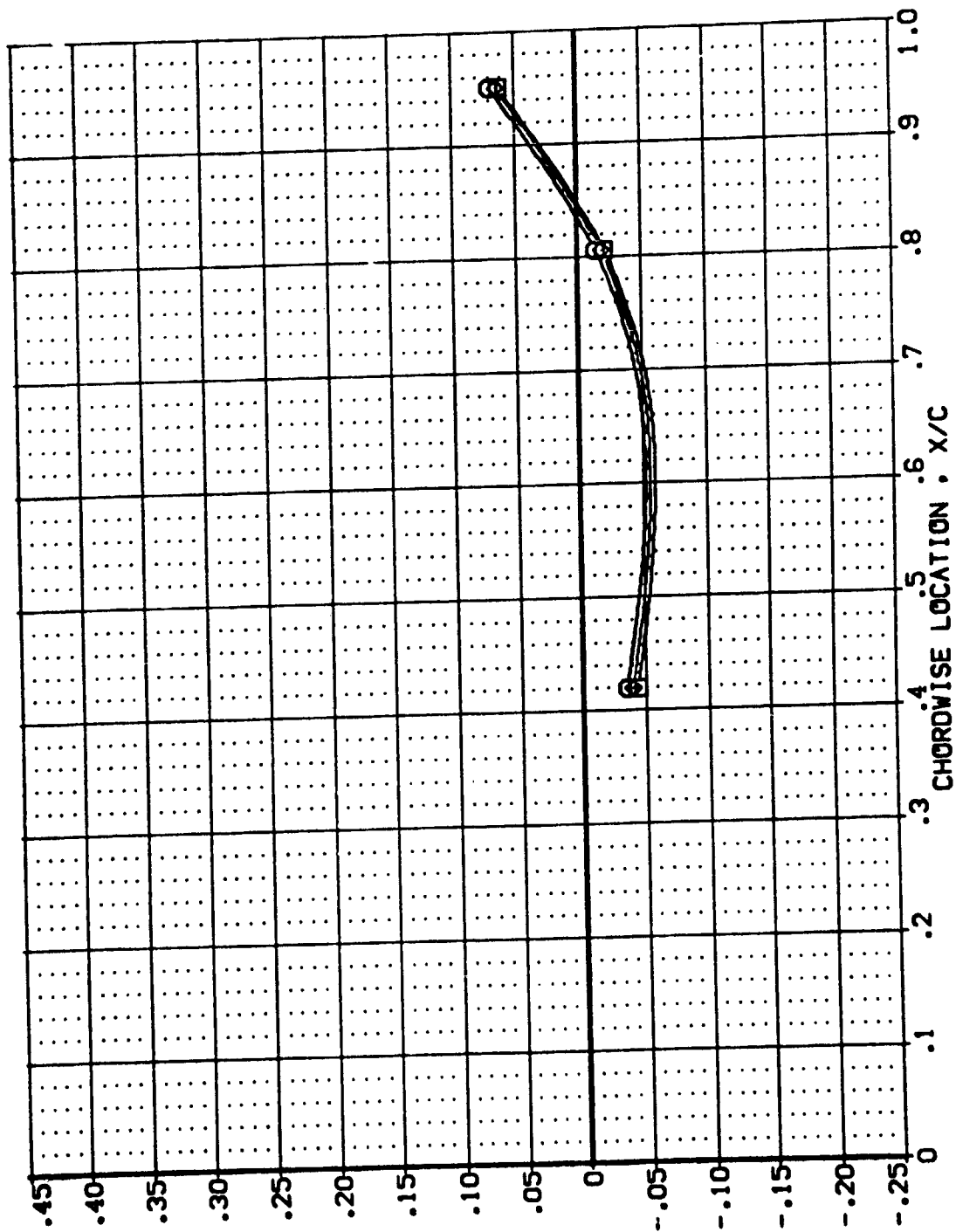
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER 0.000
0.000
0.000

SWPR 4.000
1.000
3.000

GIMBAL

PRESSURE COEFFICIENT, CP



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .427

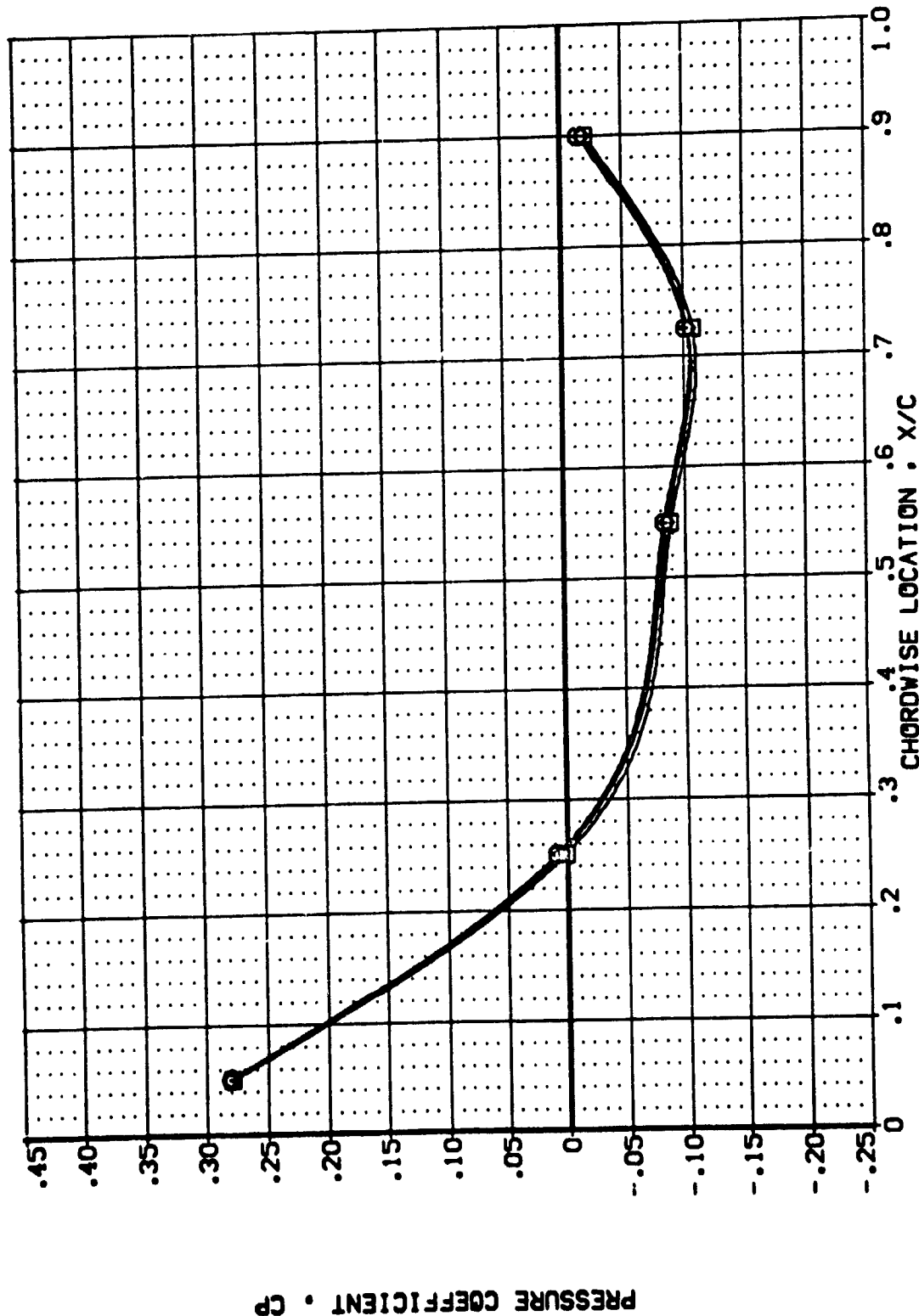
PAGE 398

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER QMR SQPR GIMBAL

(UB0097) AVE3 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 4.000

(UB0097) AVE3 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 1.000

(UB0097) AVE3 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 3.000

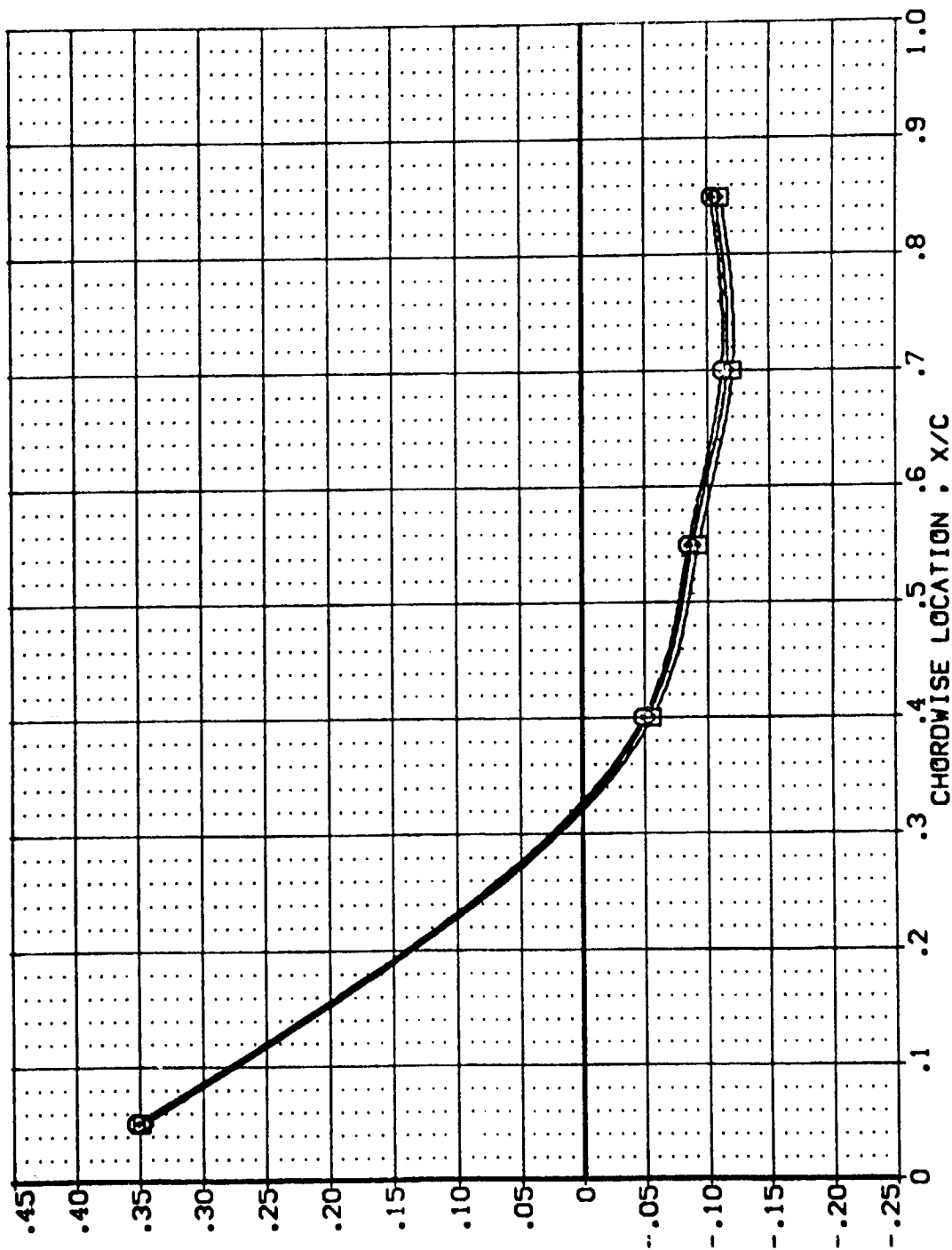


POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (UBZ037) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ037) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ053) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER C/P R ST/PR GIMBAL
 .000
 .000
 4.000
 1.000
 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .673

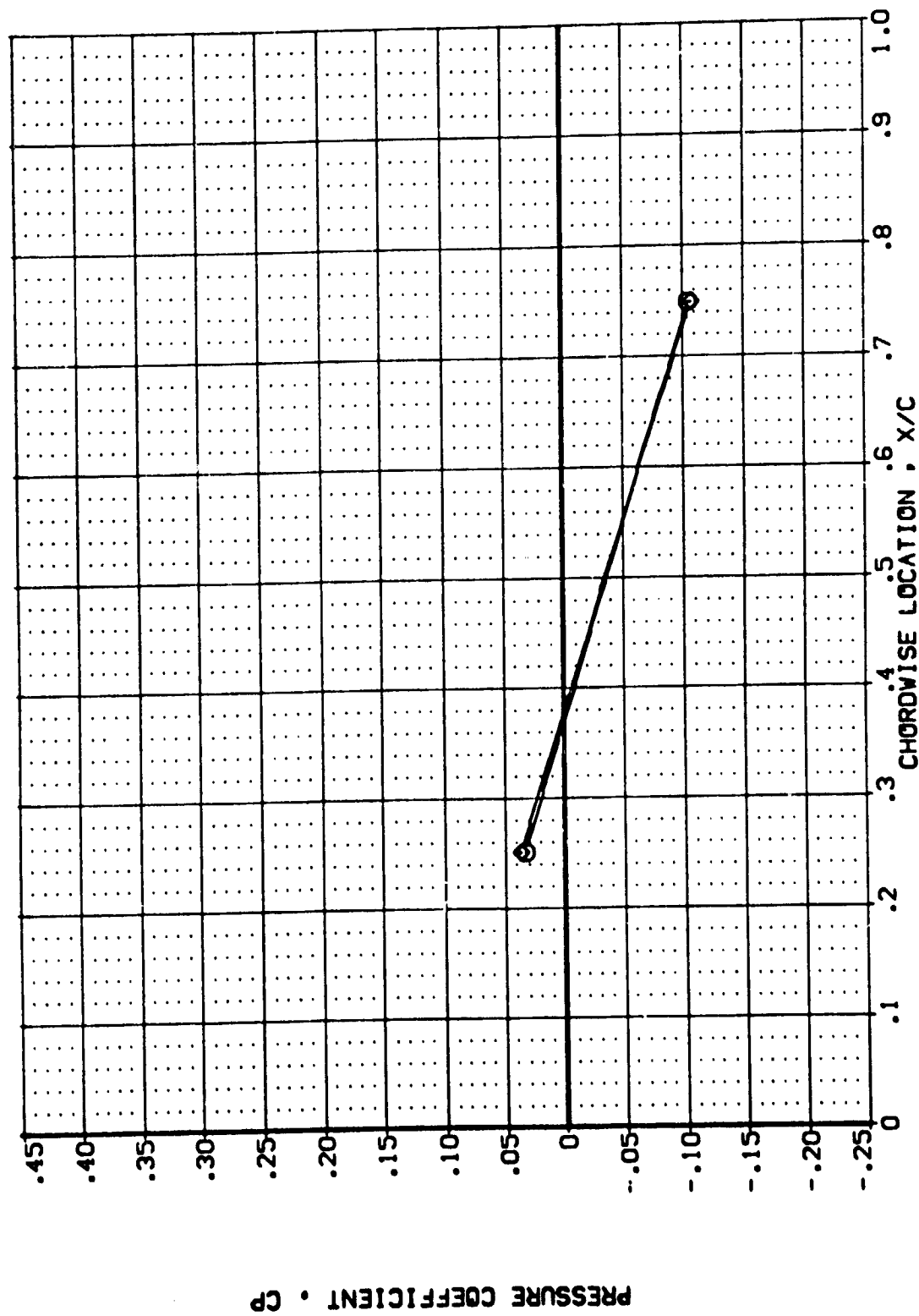
PAGE 400

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SPPR GIMBAL

(UB2057) AMES 87-10 1A12C 01 T1 S1 UPPER WING PRESSURE .000 4.000

(UB2037) AMES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 1.000

(UB2053) AMES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = -8.000 Y/B = .780

PAGE 401

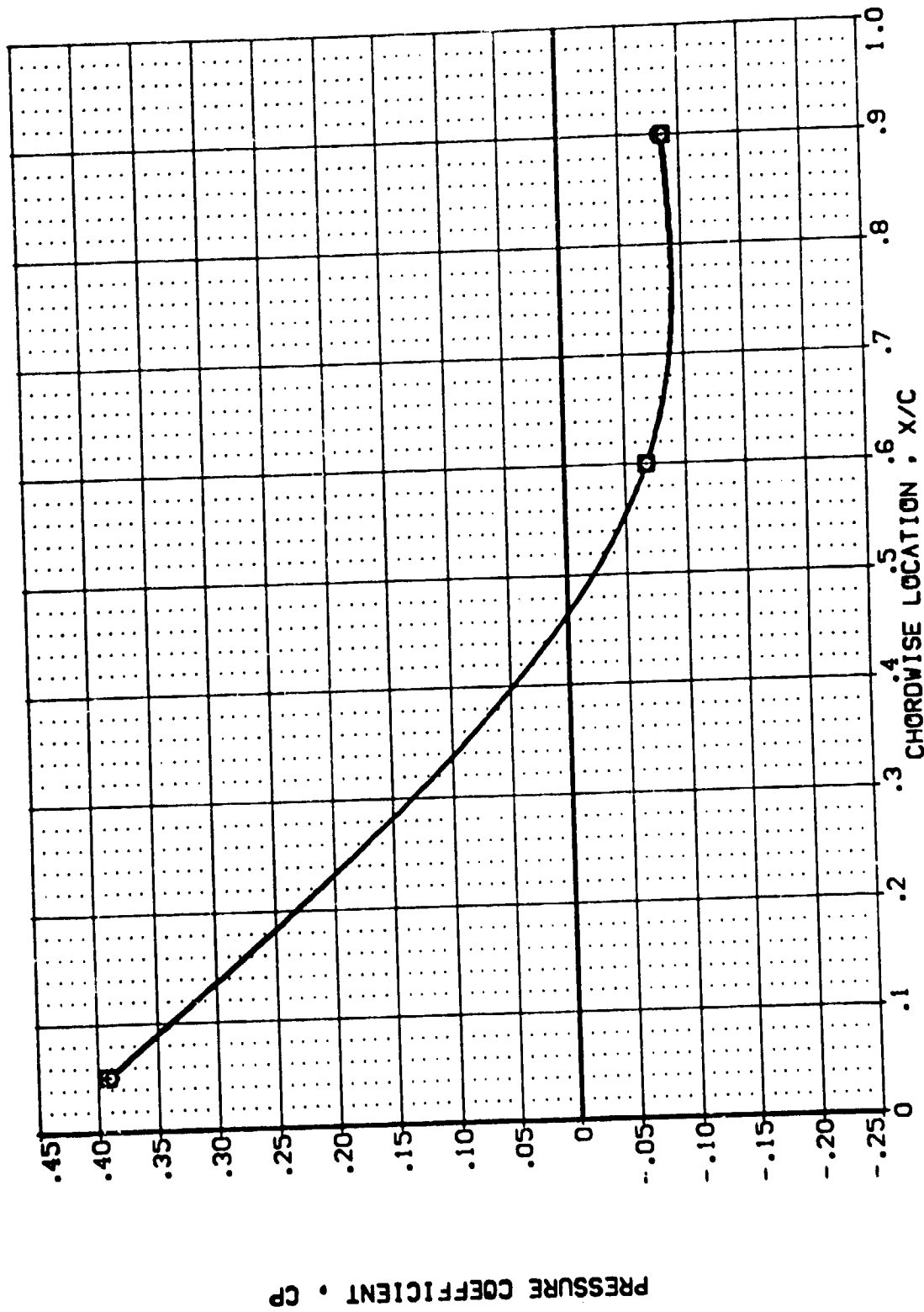
DATA SET SYMBOL

(UB2007)
(UB2007)
(UB2007)
(UB2007)

CONFIGURATION DESCRIPTION

AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER GPR SAPP GIMBAL
.000
.000
4.000
3.000



PRESSURE COEFFICIENT, CP

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

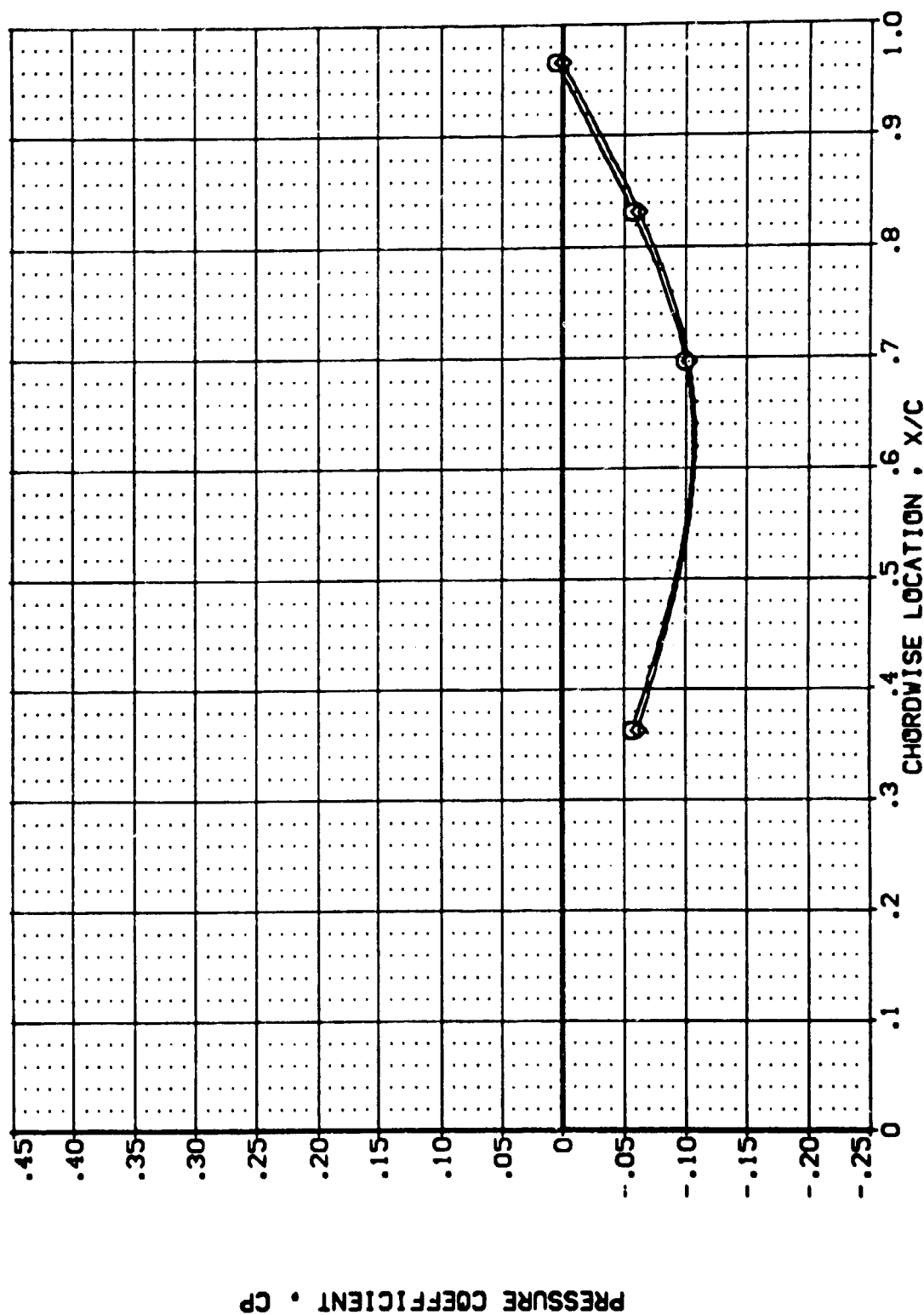
MACH = 2.500 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SWPR GIMBAL

(UB0097) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 .000 4.000

(UB0097) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 .000 1.000

(UB0093) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .299 PAGE 403

DATA SET SYMBOL

(UB0097)
(UB0097)
(UB0097)

CONFIGURATION DESCRIPTION

AVES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE

POWER

.000
.000
.000

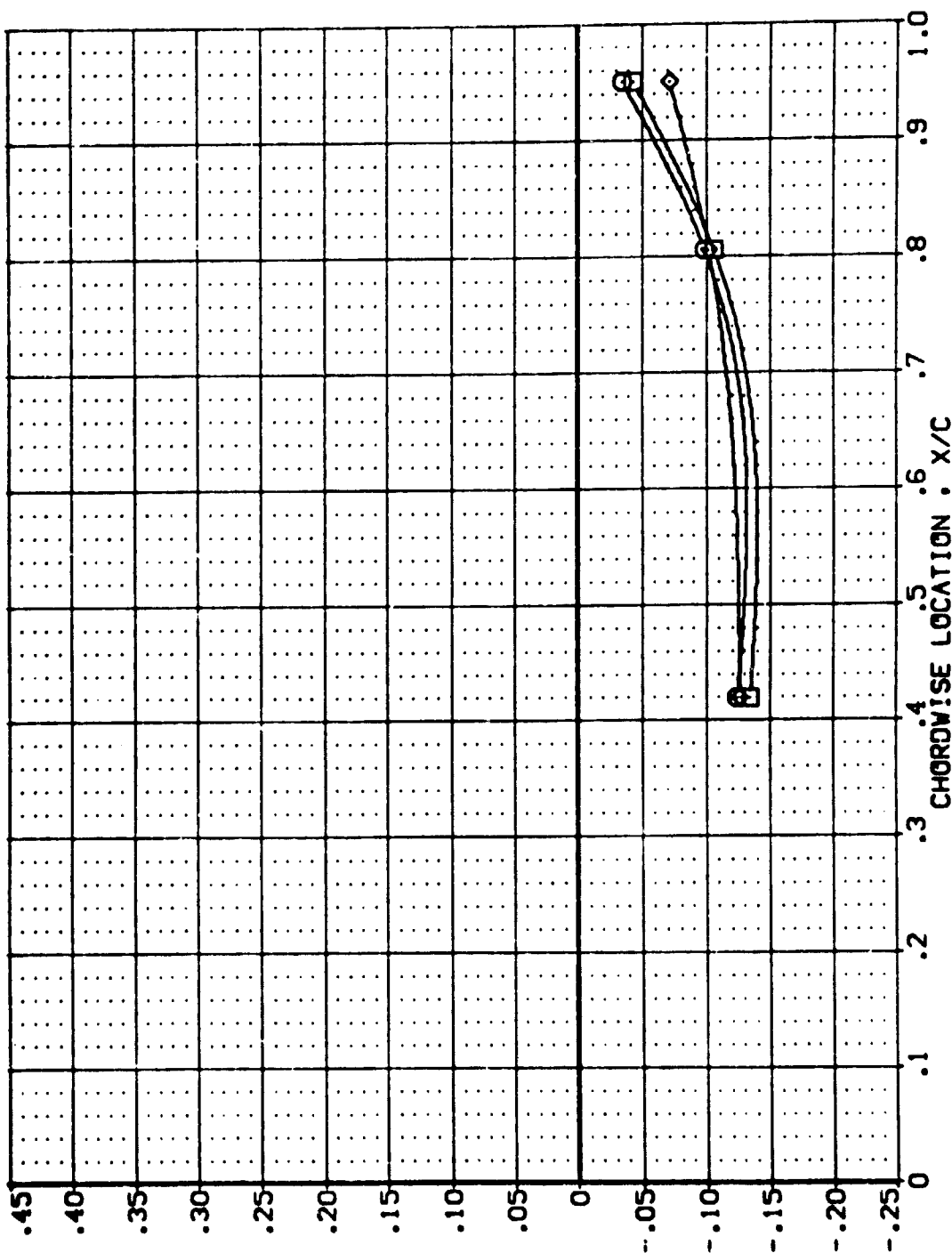
SPR

.000
.000
.000

GIMBAL

4.000
1.000
3.000

PRESSURE COEFFICIENT, CP



CHORDWISE LOCATION, X/C

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .427

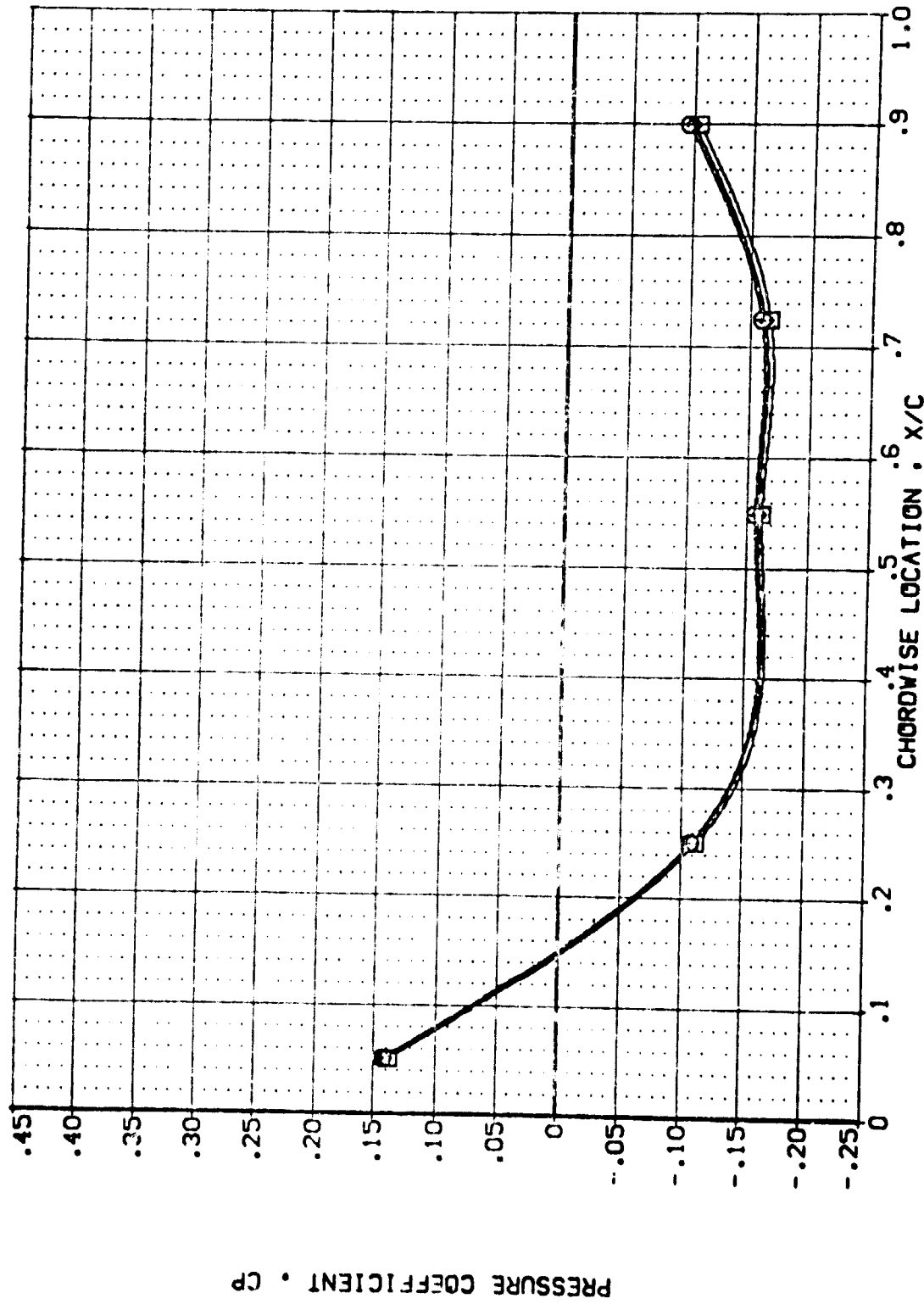
PAGE 404

DATA SET SYMBOL

(UR2097)
(UR2037)
(UR2053)

CONFIGURATION DESCRIPTION
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER 0.000
0.000
0.000
GIMBAL 4.000
1.000
3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 0.000 Y/B = .534

DATA SET SYMBOL

(LBZ057)
(LBZ057)
(LBZ050)

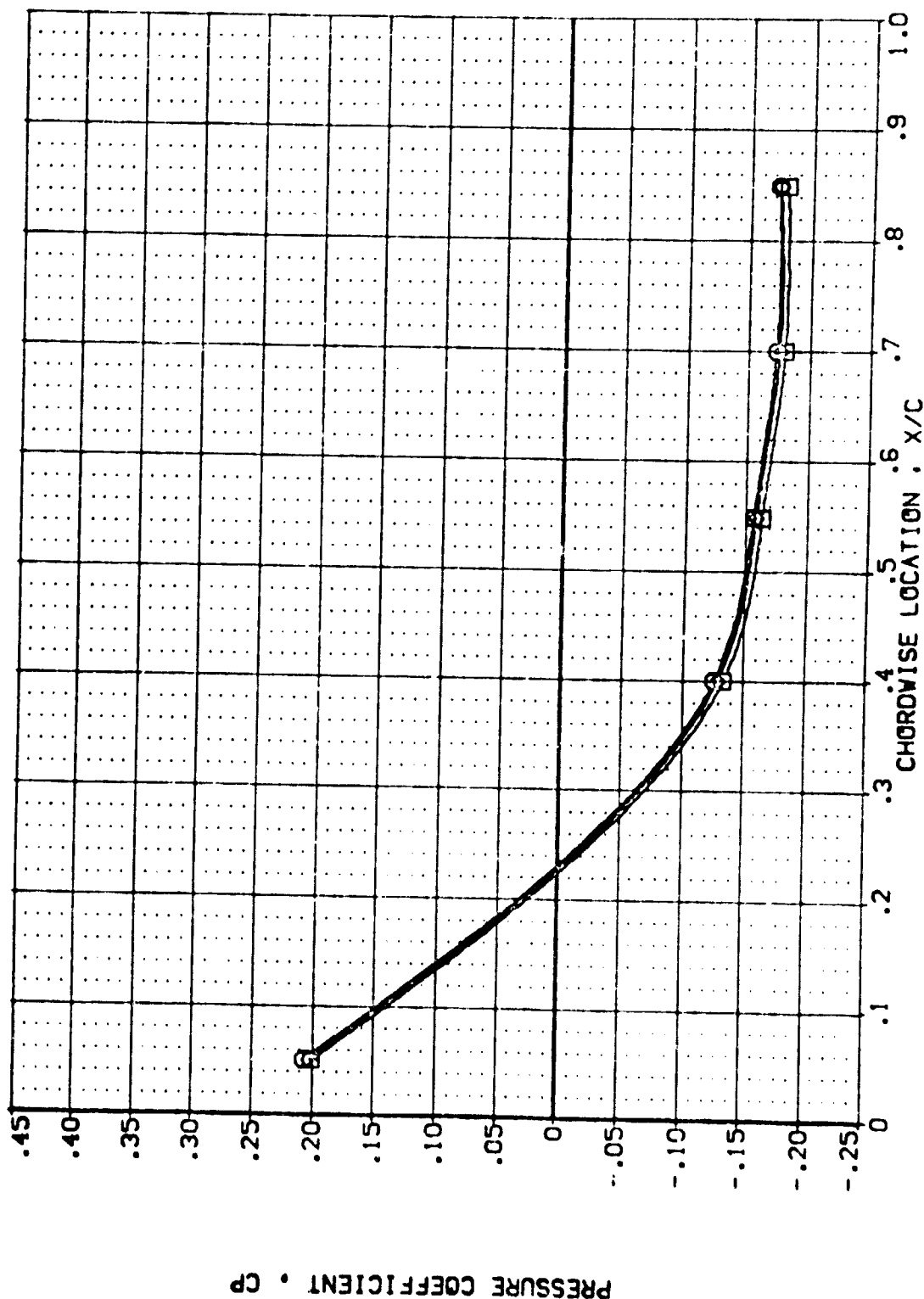
CONFIGURATION DESCRIPTION

AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER 0.000
0.000
0.000

SO-PR

GIMBAL
4.000
1.000
3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = .000 Y/B = .673

PAGE 406

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2057)
(UB2057)
(UB2057)

AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

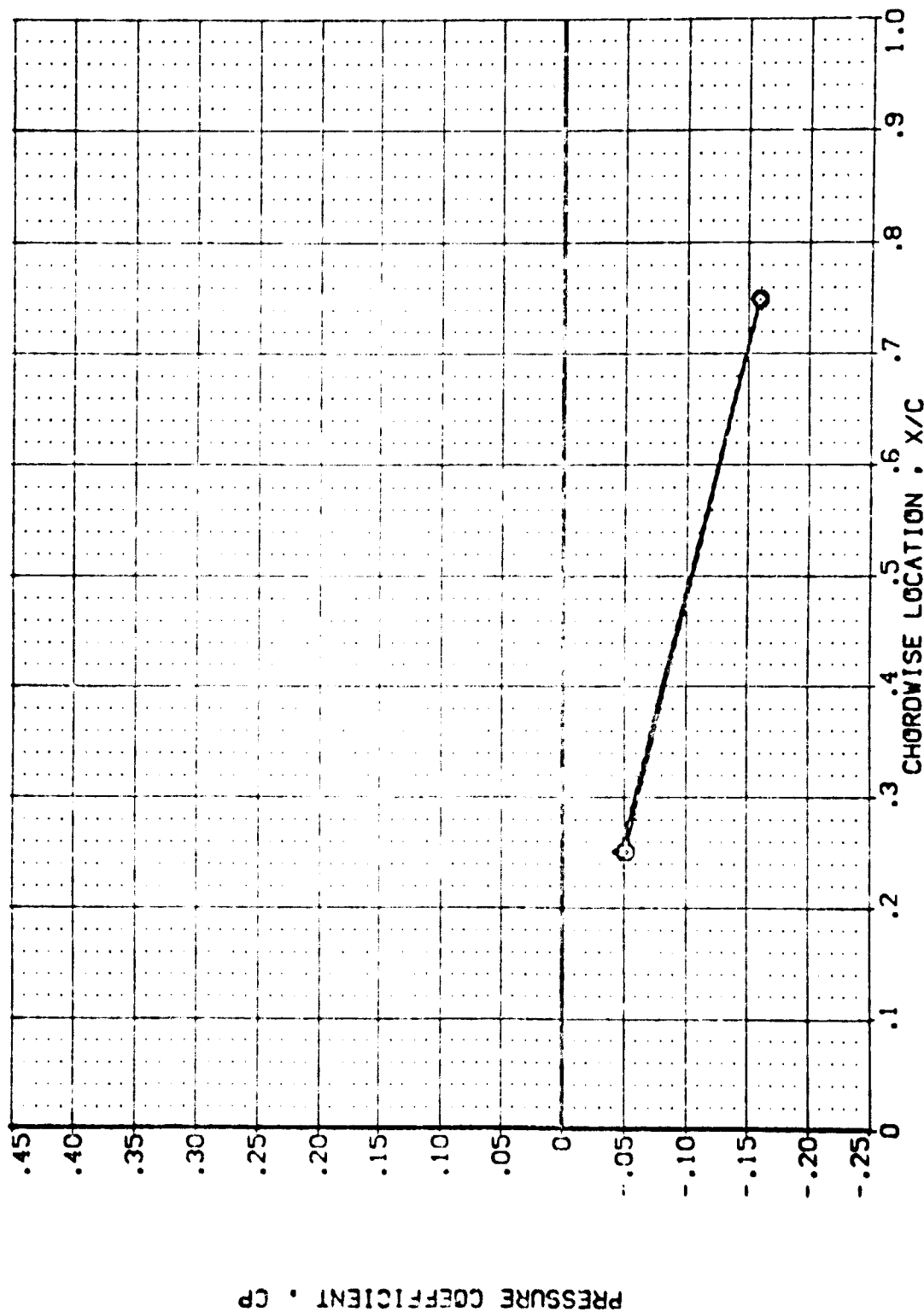
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER 0.000
POWER 0.000
POWER 0.000

OPR

SWPR

GIMBAL 4.000
GIMBAL 1.000
GIMBAL 3.000

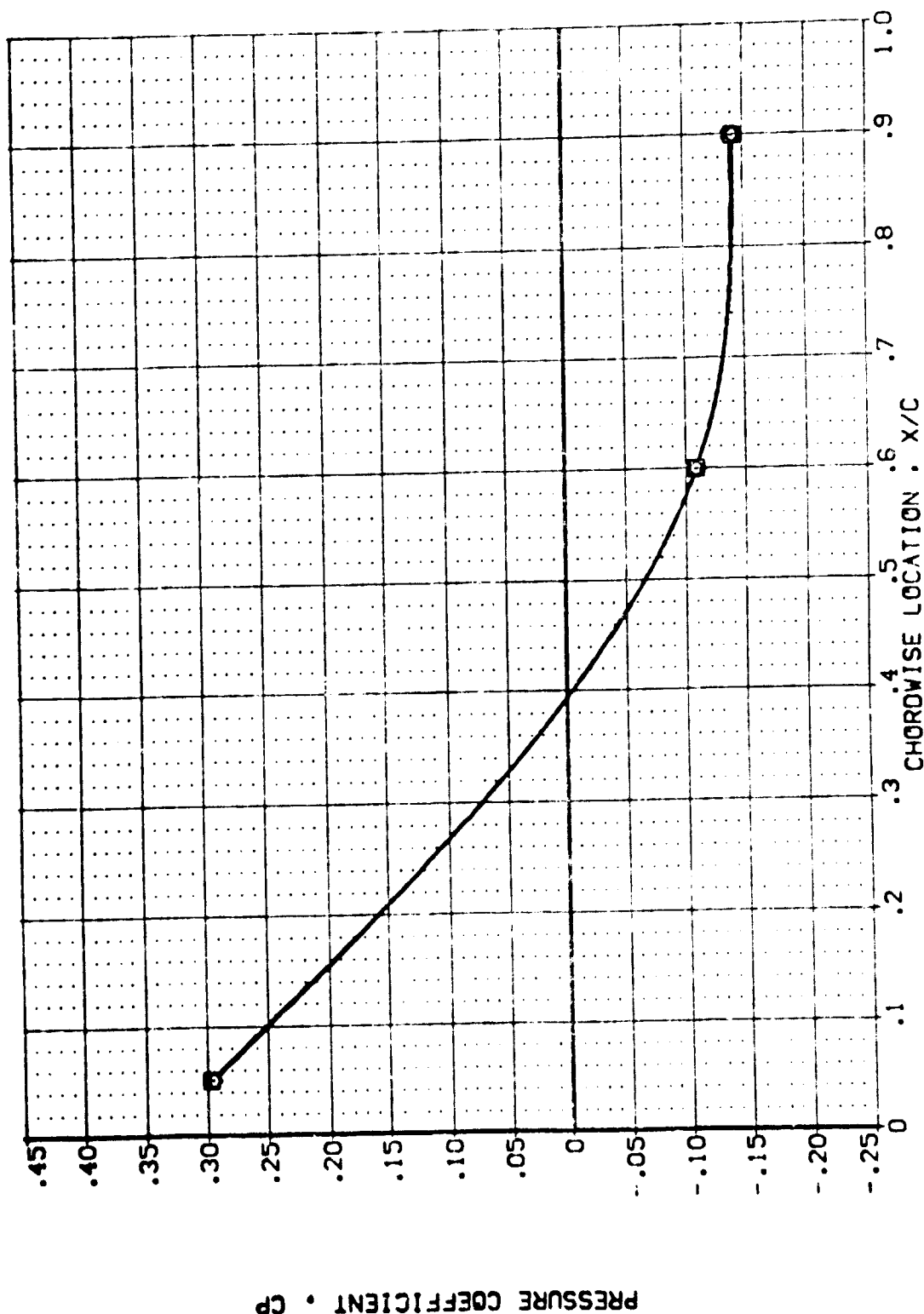


POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 0.000 Y/B = 0.780

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UB2097) 0 ASES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (UB2097) 8 ASES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (UB2098) 8 ASES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE

POWER 0.000
 GEAR 0.000
 GIMBAL 4.000
 1.000
 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

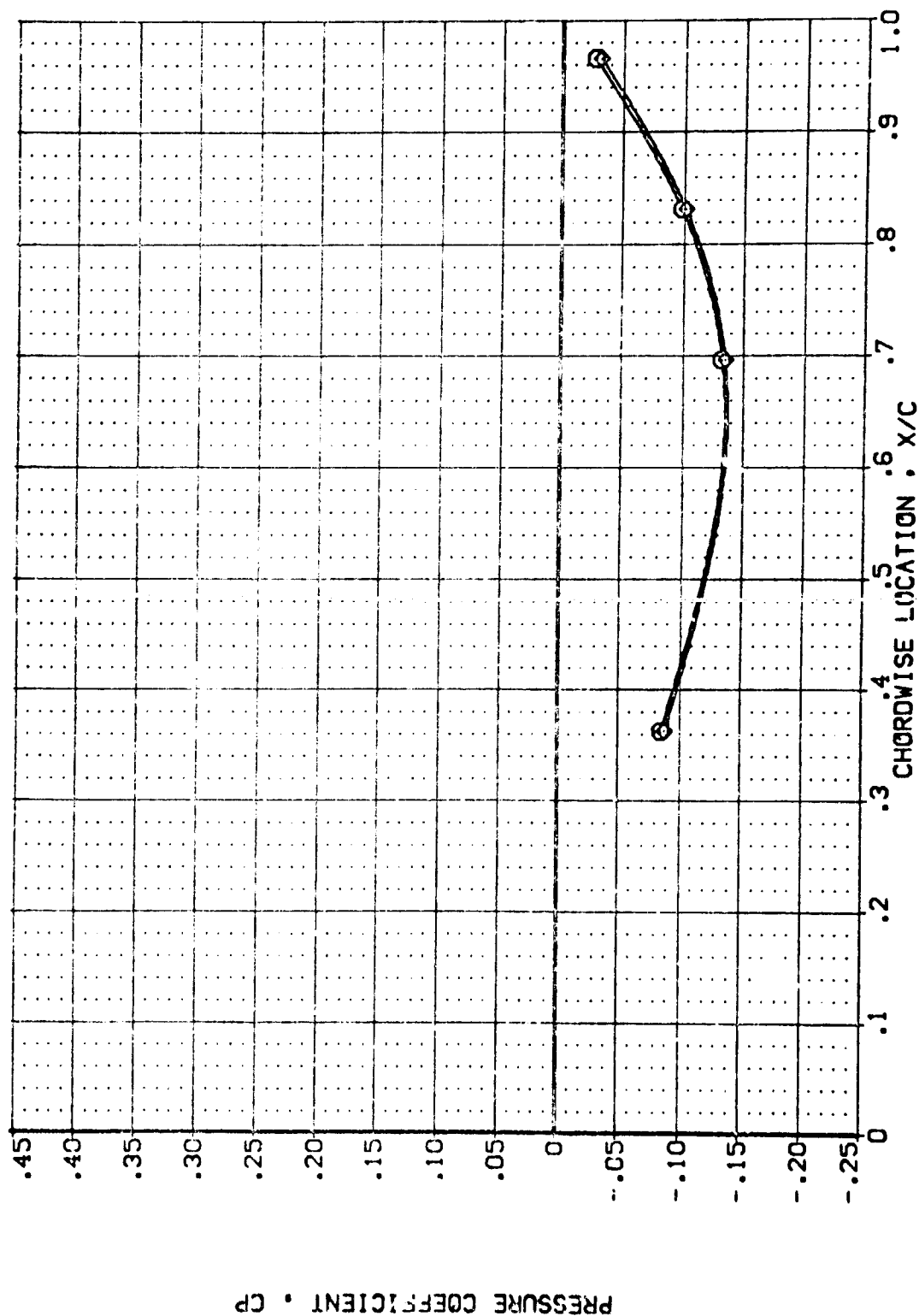
MACH = 2.500 ALPHA = .000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/C/P GIMBAL

(UBZ097) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 .000 4.000

(UBZ097) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 .000 1.000

(UBZ093) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .299

DATA SET SYMBOL

(UBZ037)
(UBZ037)
(UBZ037)



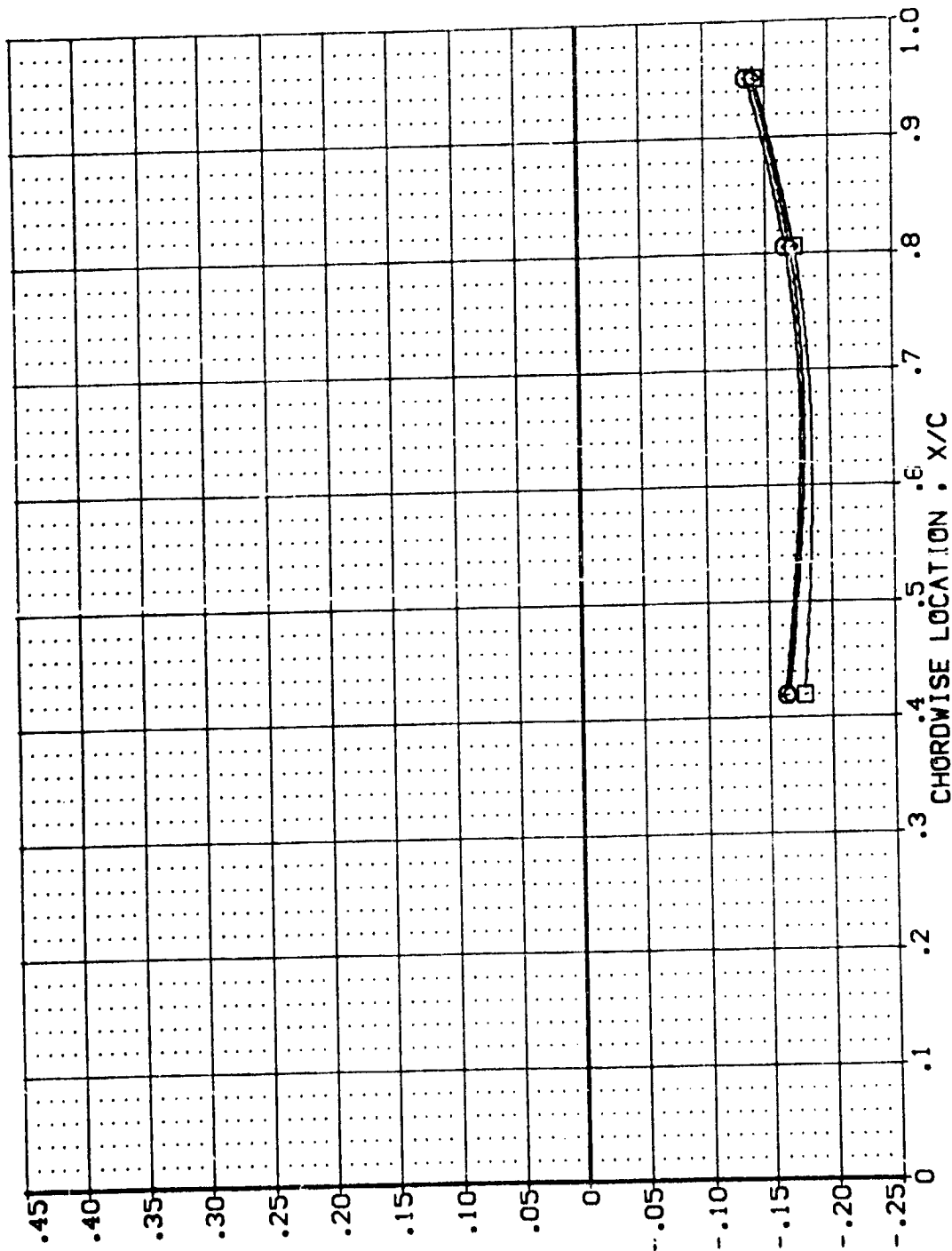
AVES 07-710
AVES 07-710
AVES 07-710

POWER
0.00
0.00
0.00

OPR
0.00
0.00
0.00

SE-PR
4.000
1.000
3.000

GIMBAL
4.000
1.000
3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP
MACH = 2.500 ALPHA = 6.000 Y/B = .427
PAGE 410

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2057)
(UB2057)
(UB2053)

AVES 87-710
AVES 87-710
AVES 87-710

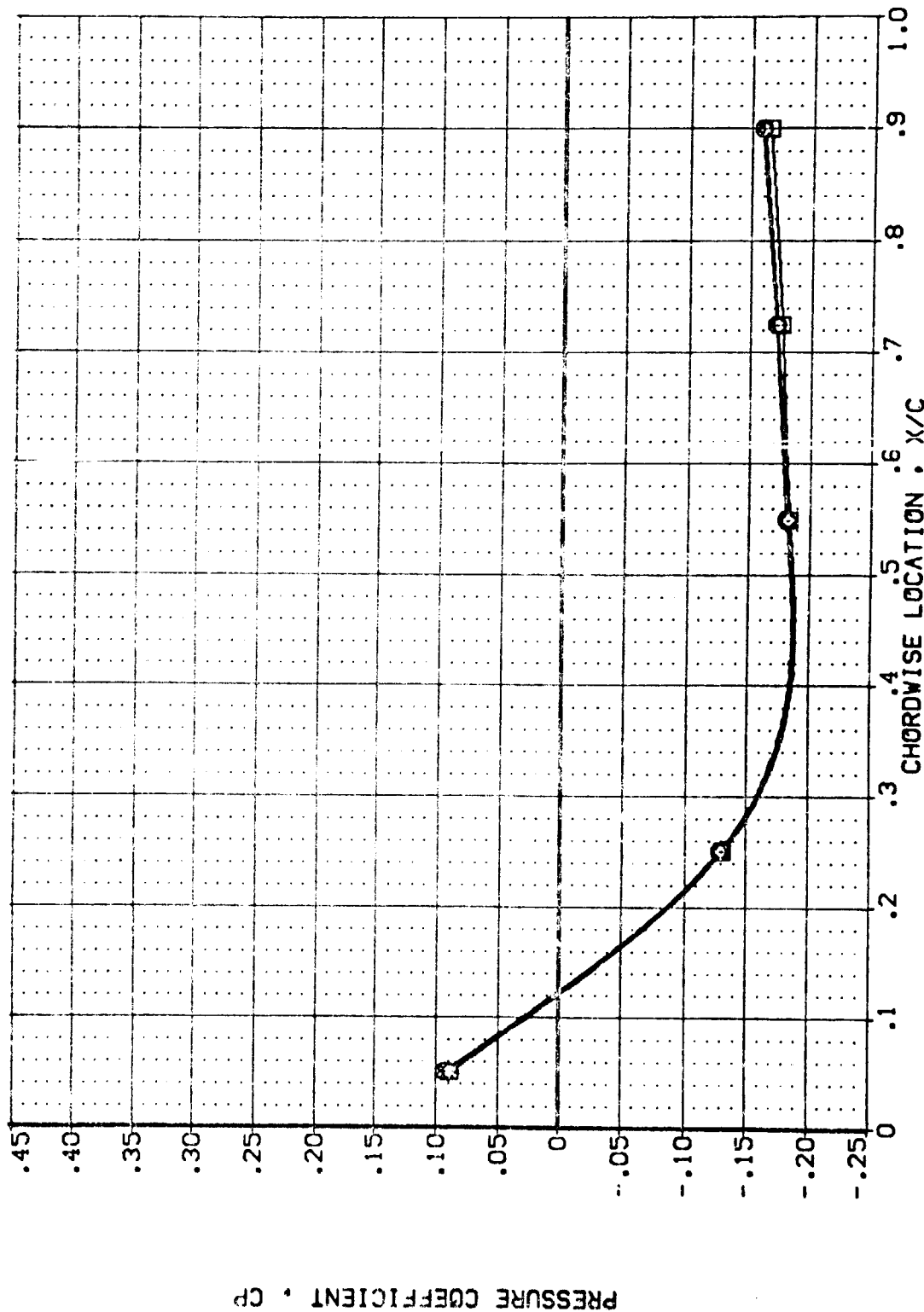
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER 0.000
0.000
0.000

SPR 0.000
0.000
0.000

GIMBAL 4.000
1.000
3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(L8Z087)
(L8Z037)
(L8Z053)

AVES 87-710
AVES 87-710
AVES 87-710

AI12C 01 TI SI
AI12C 01 TI SI
AI12C 01 TI SI

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

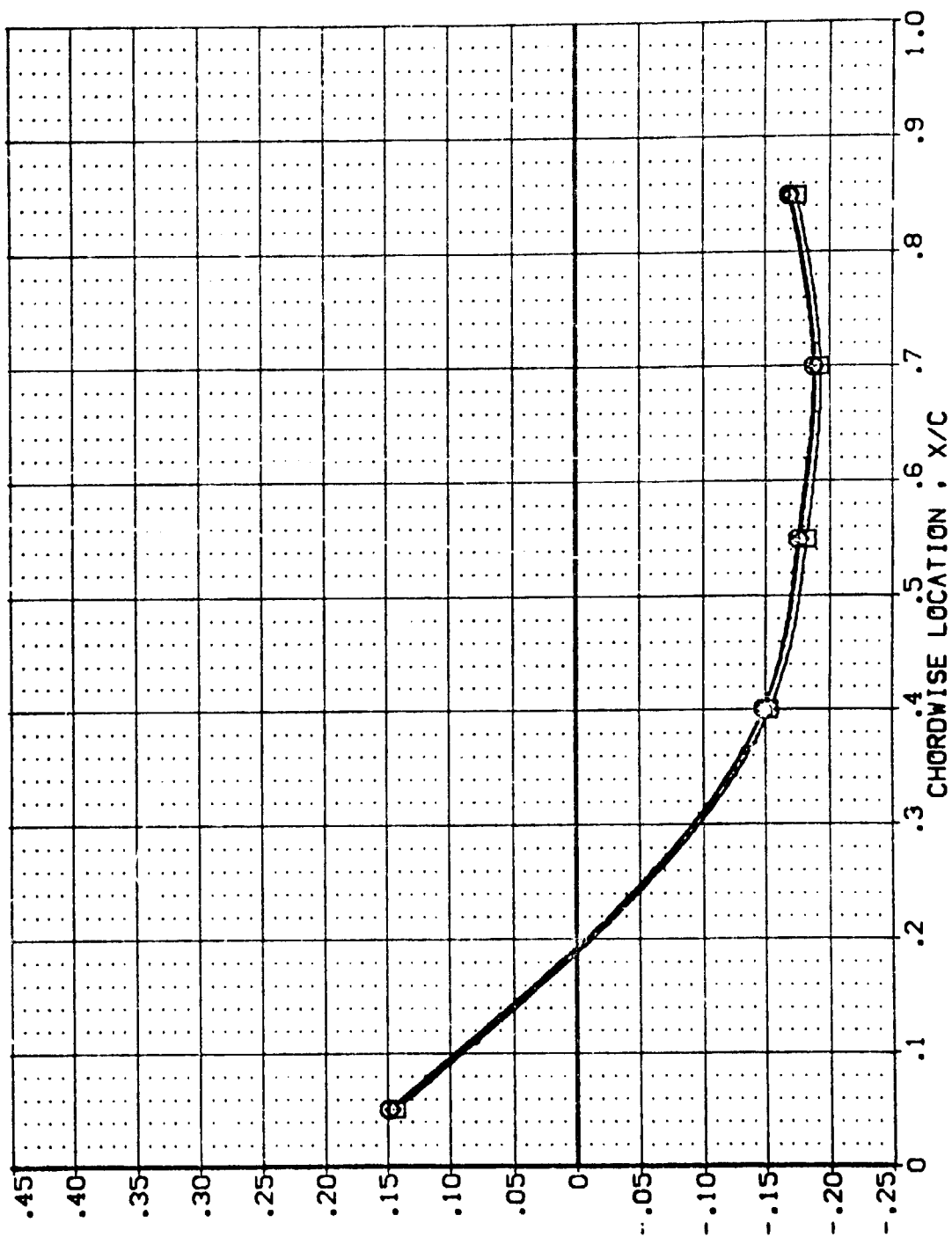
POWER 0.000
POWER 0.000
POWER 0.000

SRPR

Q/R

GIMBAL
4.000
1.000
3.000

PRESSURE COEFFICIENT, CP

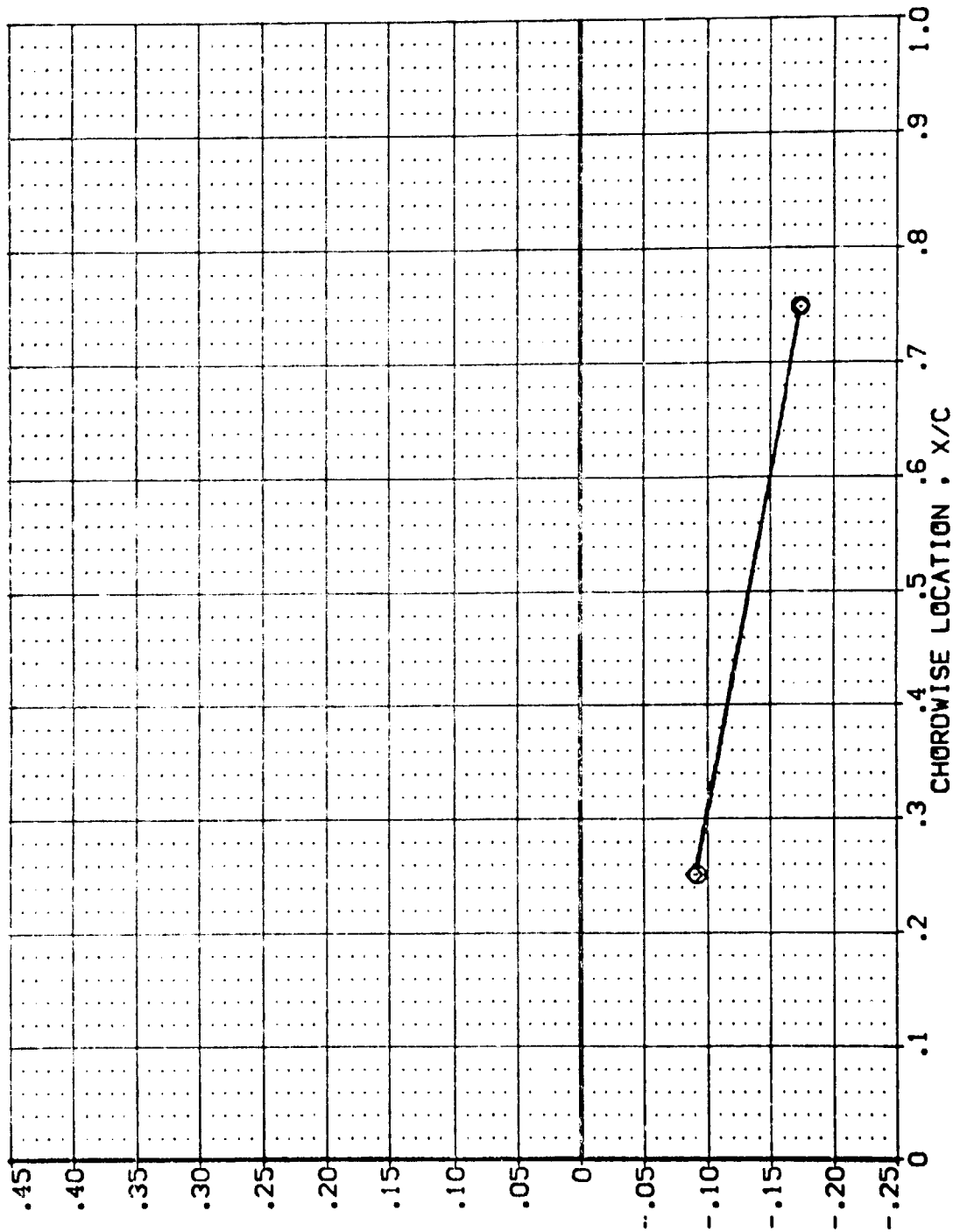


POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UB-0097) AYES 87-710 IAL2C 01 T1 SI UPPER WING PRESSURE
 (UB-0097) AYES 87-710 IAL2C 01 T1 SI UPPER WING PRESSURE
 (UB-0093) AYES 87-710 IAL2C 01 T1 SI UPPER WING PRESSURE

POWER GPR SC-PR GIMBAL
 .000
 .000
 1.000
 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .780

DATA SET SYMBOL

(UB2097)
(UB2097)
(UB2098)

CONFIGURATION DESCRIPTION

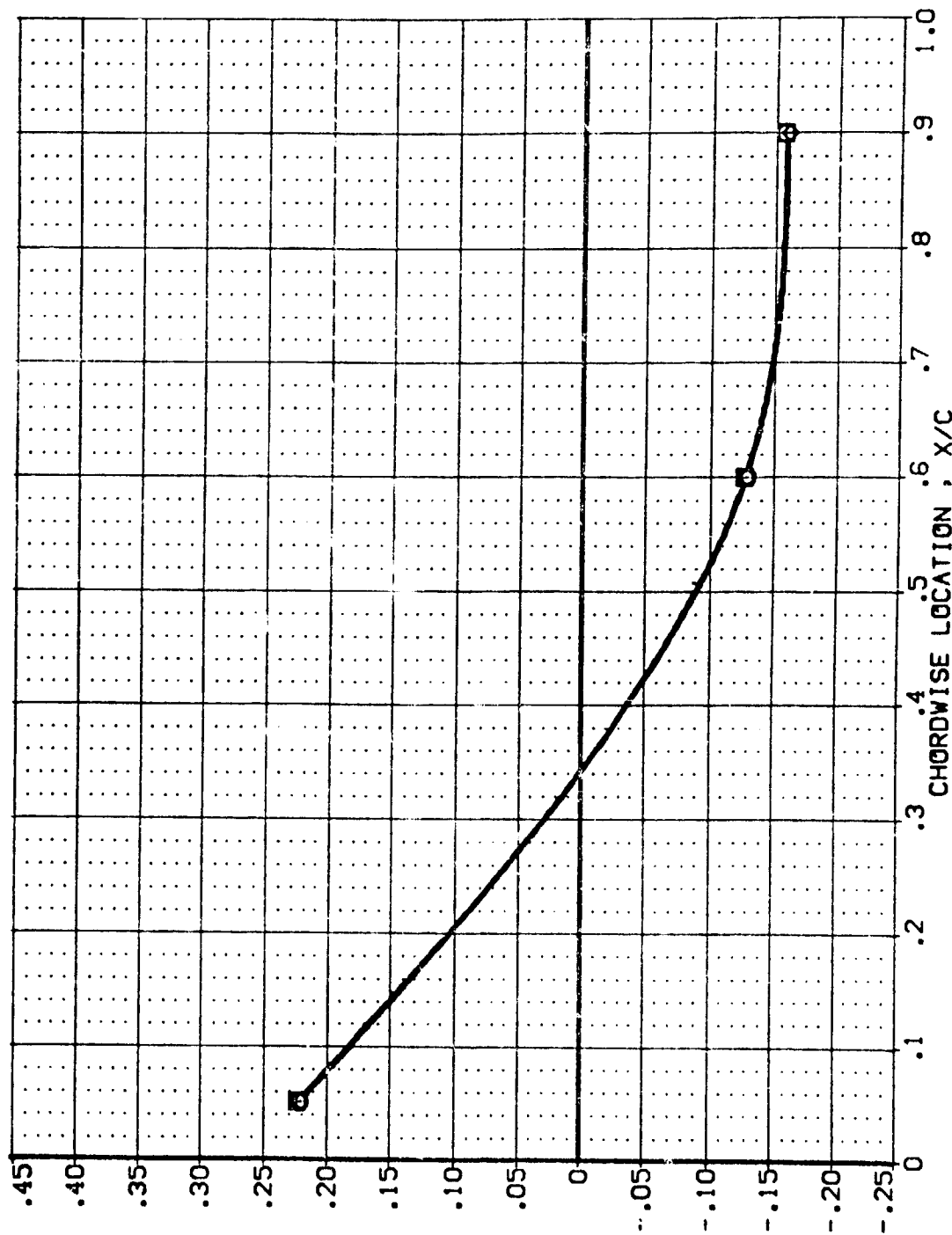
AVES 87-710 IAL2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAL2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAL2C 01 T1 S1 UPPER WING PRESSURE

POWER 0.000
0.000
0.000

SUPER

GIMBAL
4.000
1.000
3.000

PRESSURE COEFFICIENT, CP



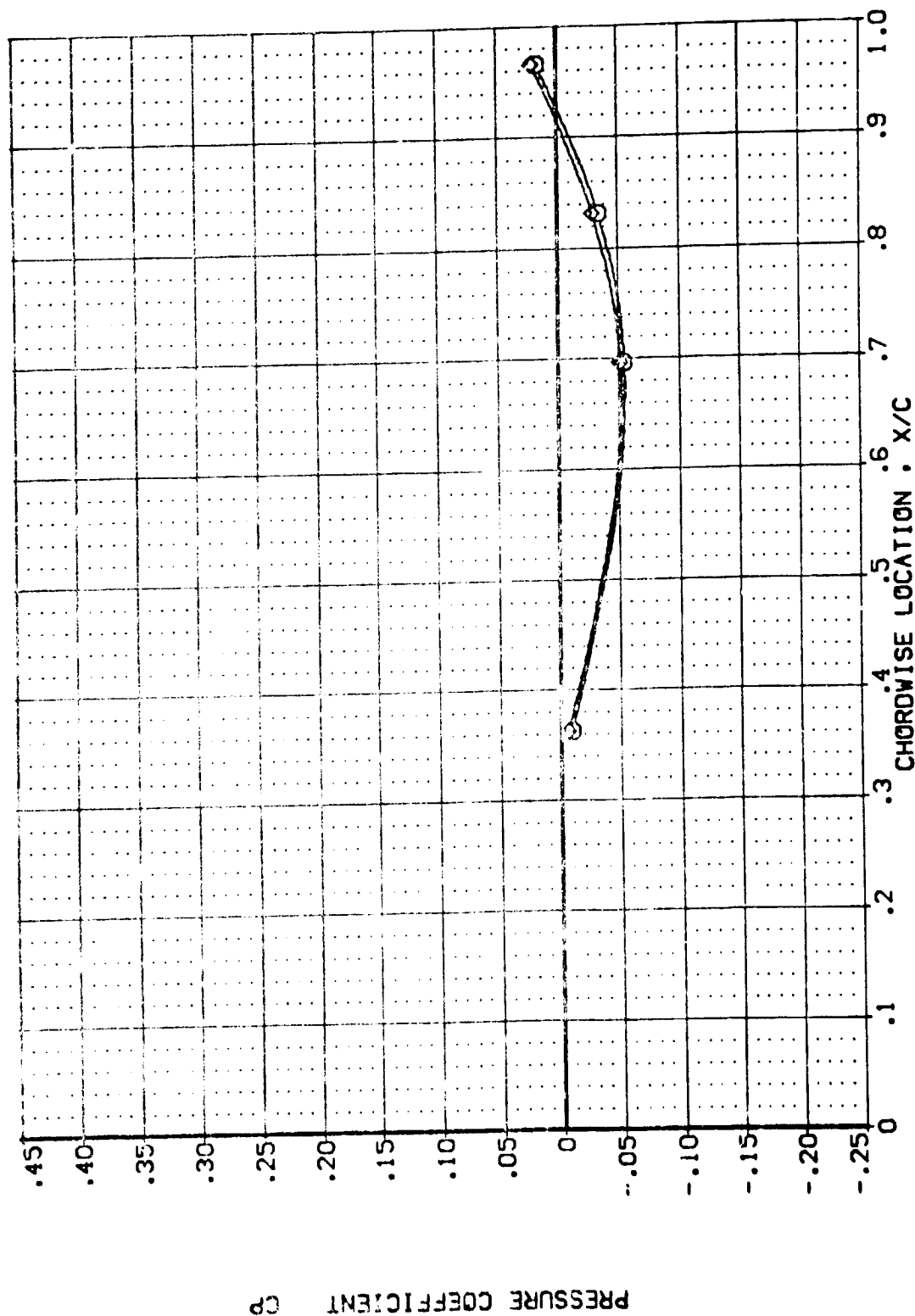
POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 2.500 ALPHA = 6.000 Y/B = .987

PAGE 414

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (U2102) AYES 87-710 [A] 2C [0] [1] [5] LOWER WING PRESSURE
 (U2103) AYES 87-710 [A] 2C [0] [1] [5] UPPER WING PRESSURE
 (U2104) AYES 87-710 [A] 2C [0] [1] [5] UPPER WING PRESSURE

POWER 0.000
 GIMBAL 4.000
 SPWR 3.000



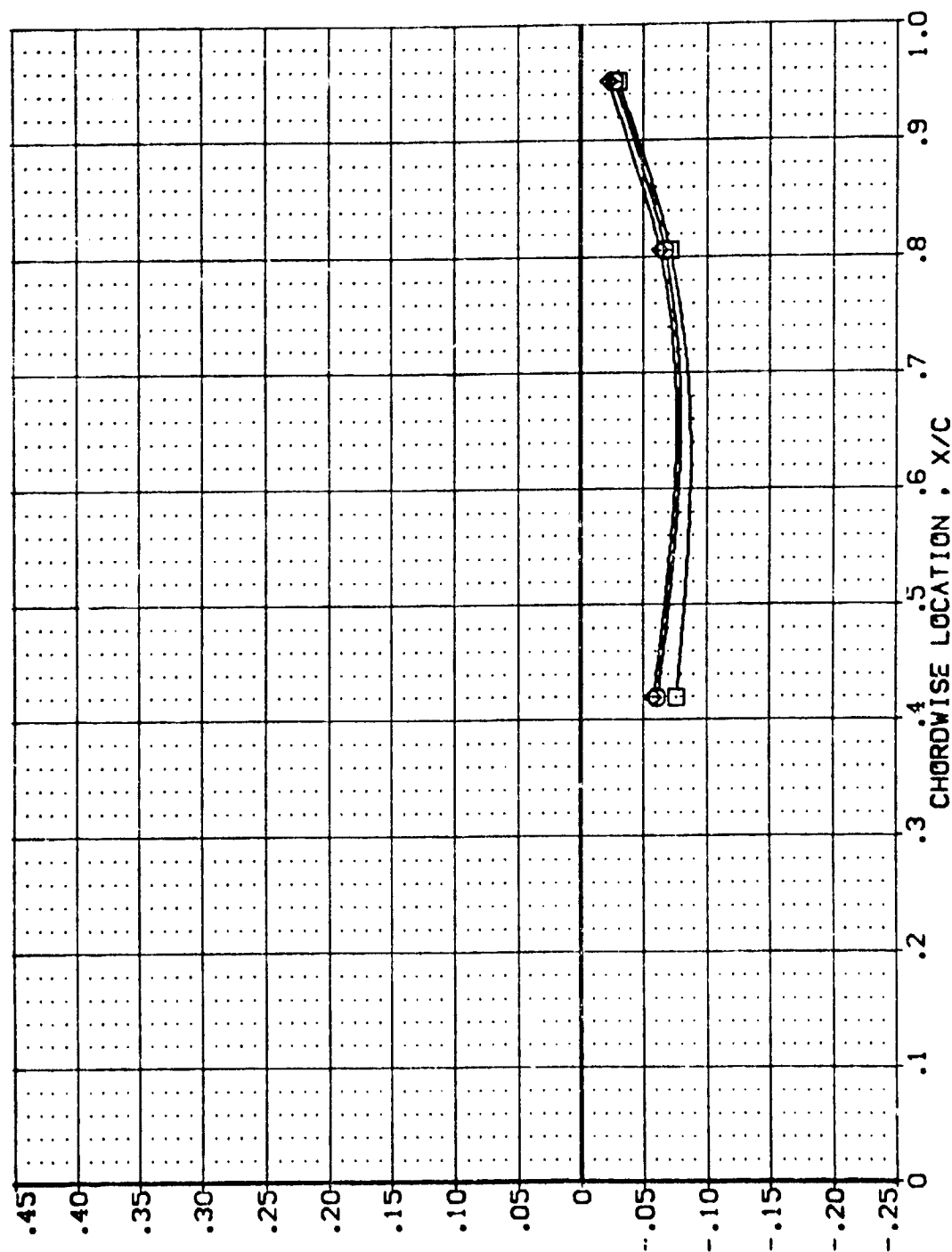
POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP
 MACH = 3.000 ALPHA = -4.000 Y/B = .299 PAGE 415

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/N STOR GIMBAL

(UBZ102) AYES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 4.000

(UBZ038) AYES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 1.000

(UBZ085) AYES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 3.000

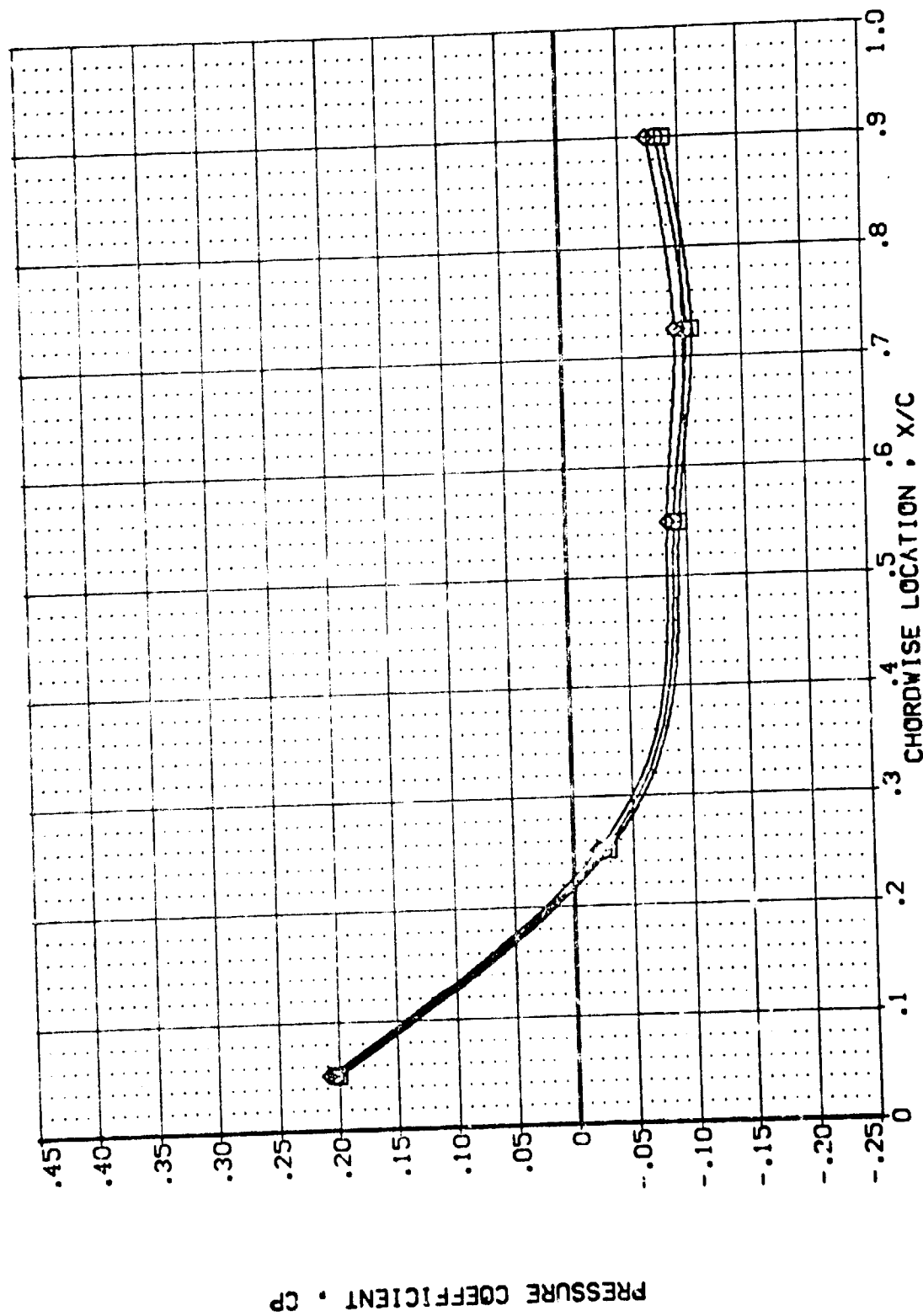


PRESSURE COEFFICIENT • CP




POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -4.000 Y/B = .427 PAGE 416

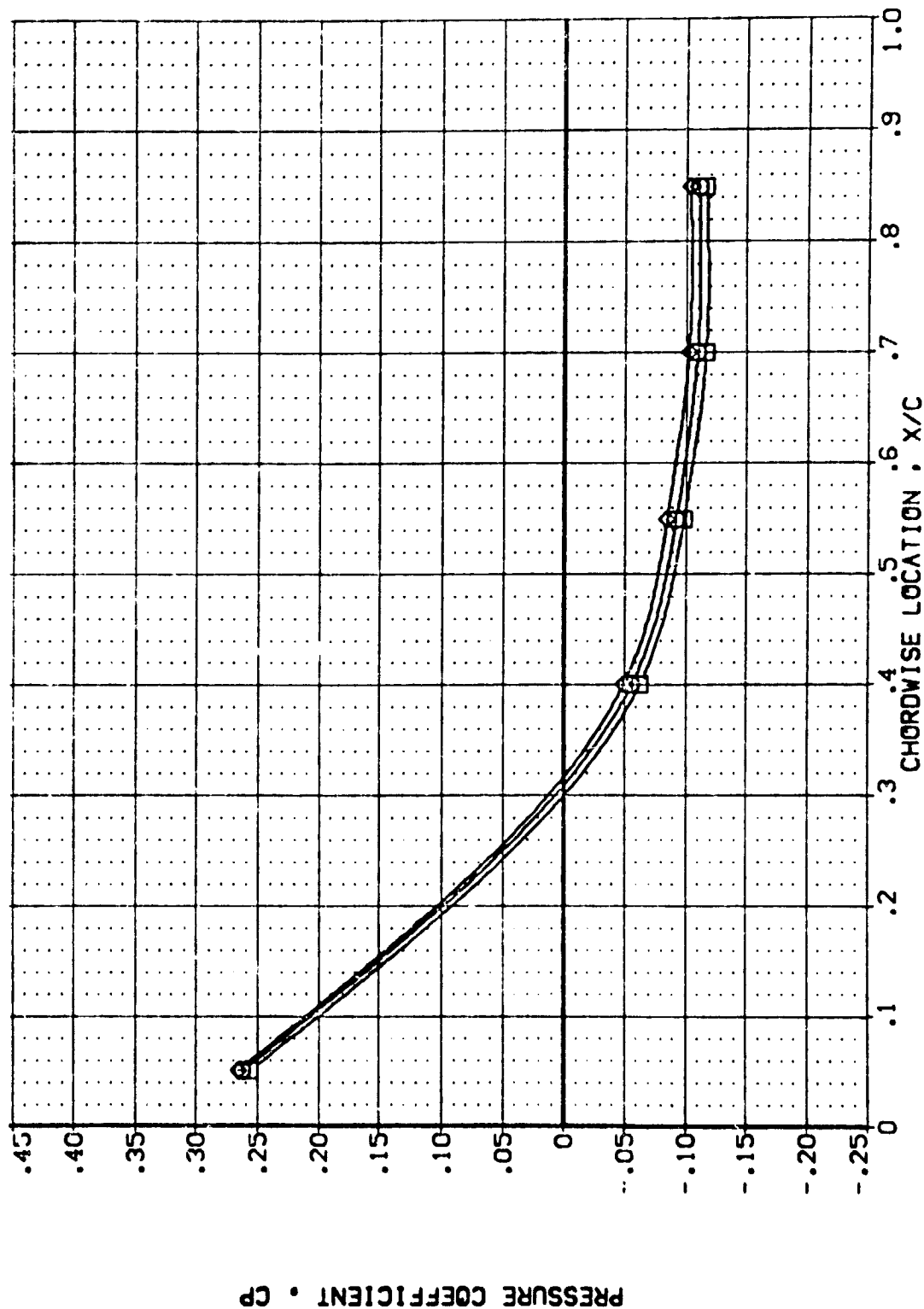
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CTR SPPR GIMBAL
 (U82102) AYES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 4.000
 (U82038) AYES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 1.000
 (U82086) AYES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP
 MACH = 3.000 ALPHA = -4.000 Y/B = .534
 PAGE 417


DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZ102)  AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (UBZ008)  AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (UBZ005)  AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE

GIMBAL GIMBAL
 4.000 4.000
 1.000 1.000
 3.000 3.000

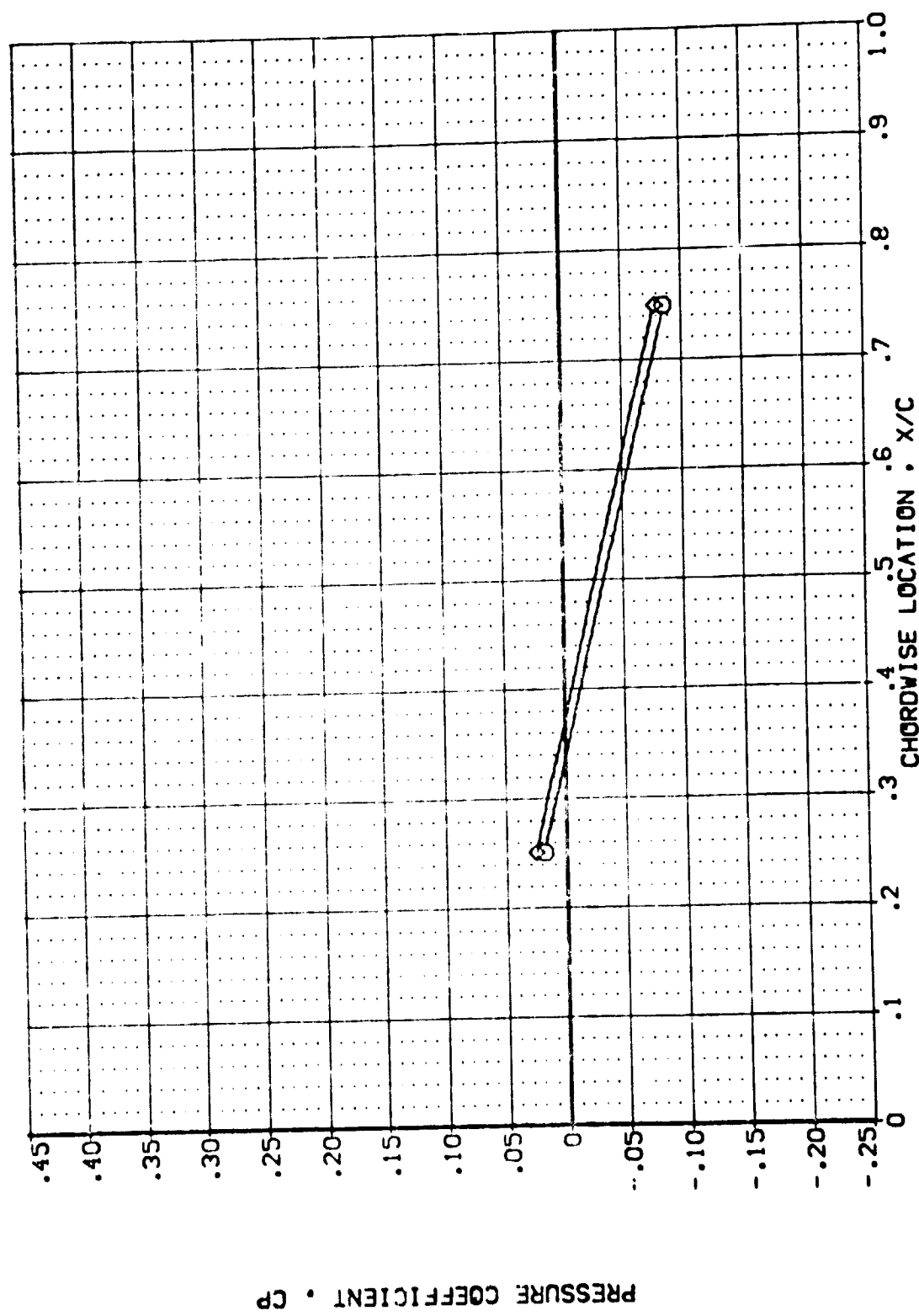


POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -4.000 Y/B = .673 PAGE 418

DATA SET SYMBOL: 
 CONFIGURATION DESCRIPTION:

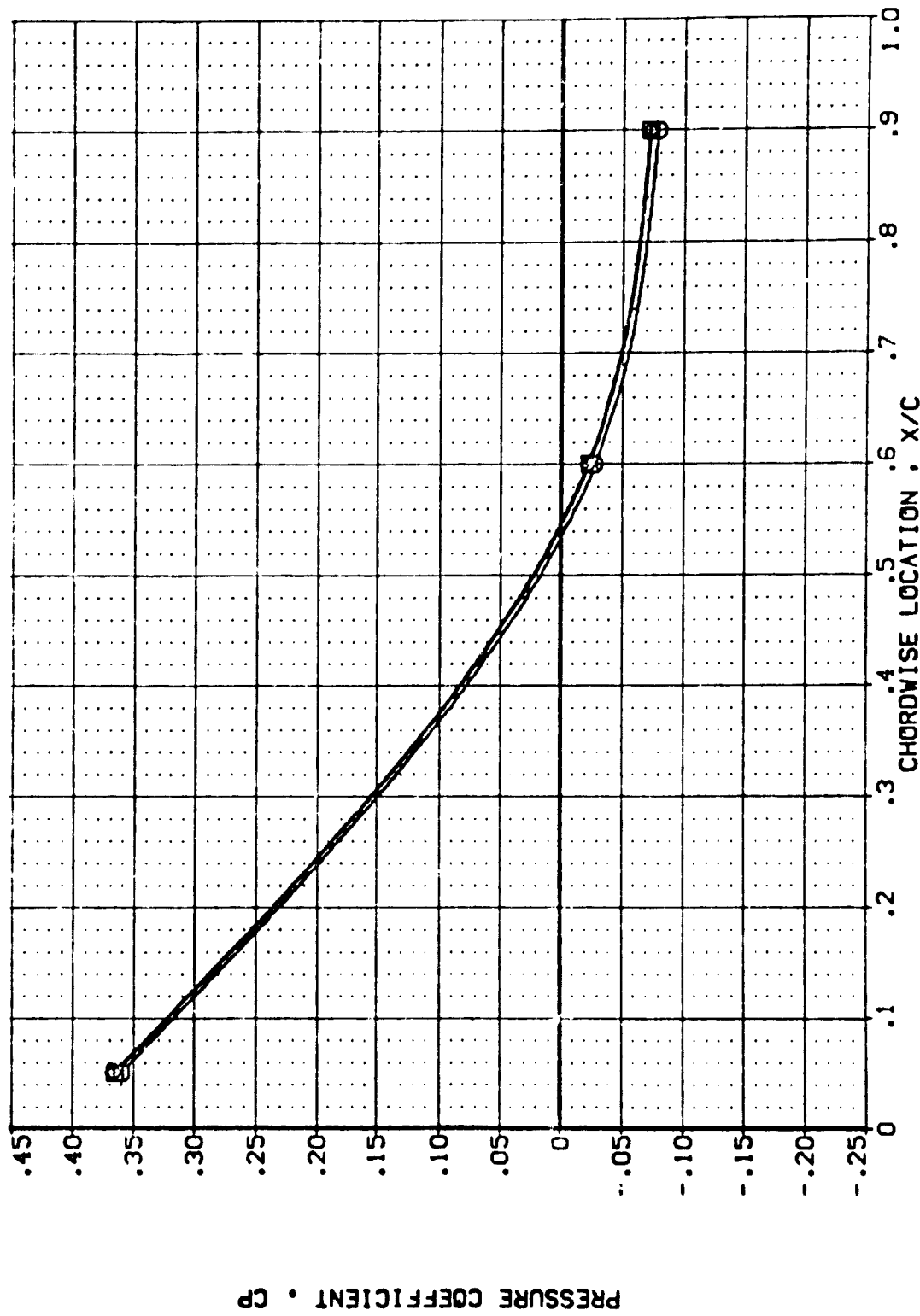
AWES 87-710	IA12C 01	TI	SI	UPPER WING PRESSURE	POWER	GPR	SR-PR	GIMBAL
AWES 87-710	IA12C 01	TI	SI	UPPER WING PRESSURE	.000			4.000
AWES 87-710	IA12C 01	TI	SI	UPPER WING PRESSURE	.000			3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP
 MACH = 3.000 ALPHA = -4.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZ100) ASES 87-710 IALZC 01 T1 S1
 (UBZ006) ASES 87-710 IALZC 01 T1 S1
 (UBZ006) ASES 87-710 IALZC 01 T1 S1

COVER C R UPPER GIMBAL
 .000 .000 .000
 .000 .000 .000
 .000 .000 .000



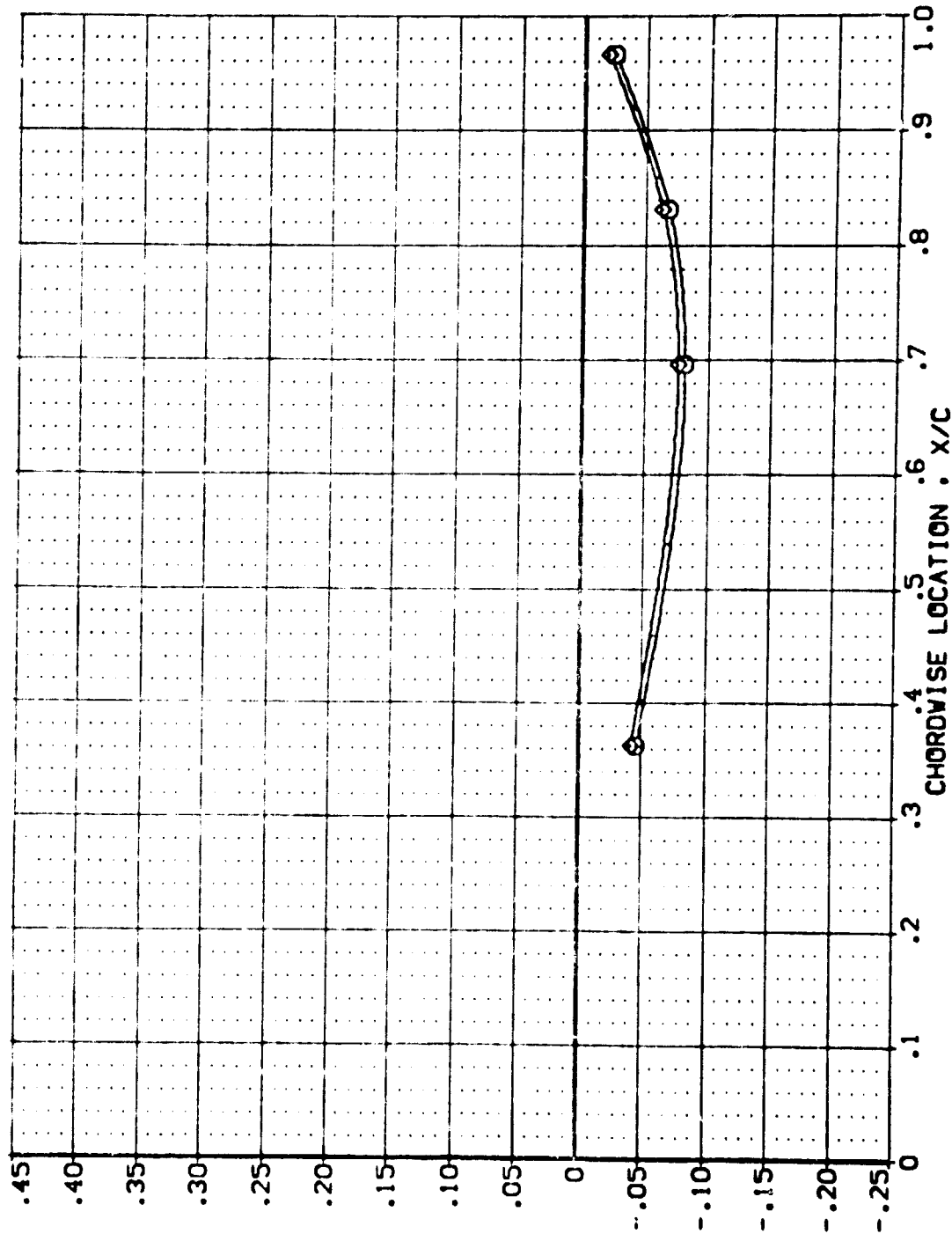
POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP
 MACH = 3.000 ALPHA = -4.000 Y/B = .887
 PAGE 420

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UR2102)
(UB2008)
(UB2005)

AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE
AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE
AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE

POWER 0.000
CPR 0.000
SAPR 0.000
GIBBAL 4.000
1.000
3.000



PRESSURE COEFFICIENT • CP

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ1102)
(LBZ0308)
(LBZ0085)

AMES 87-710
AMES 87-710
AMES 87-710

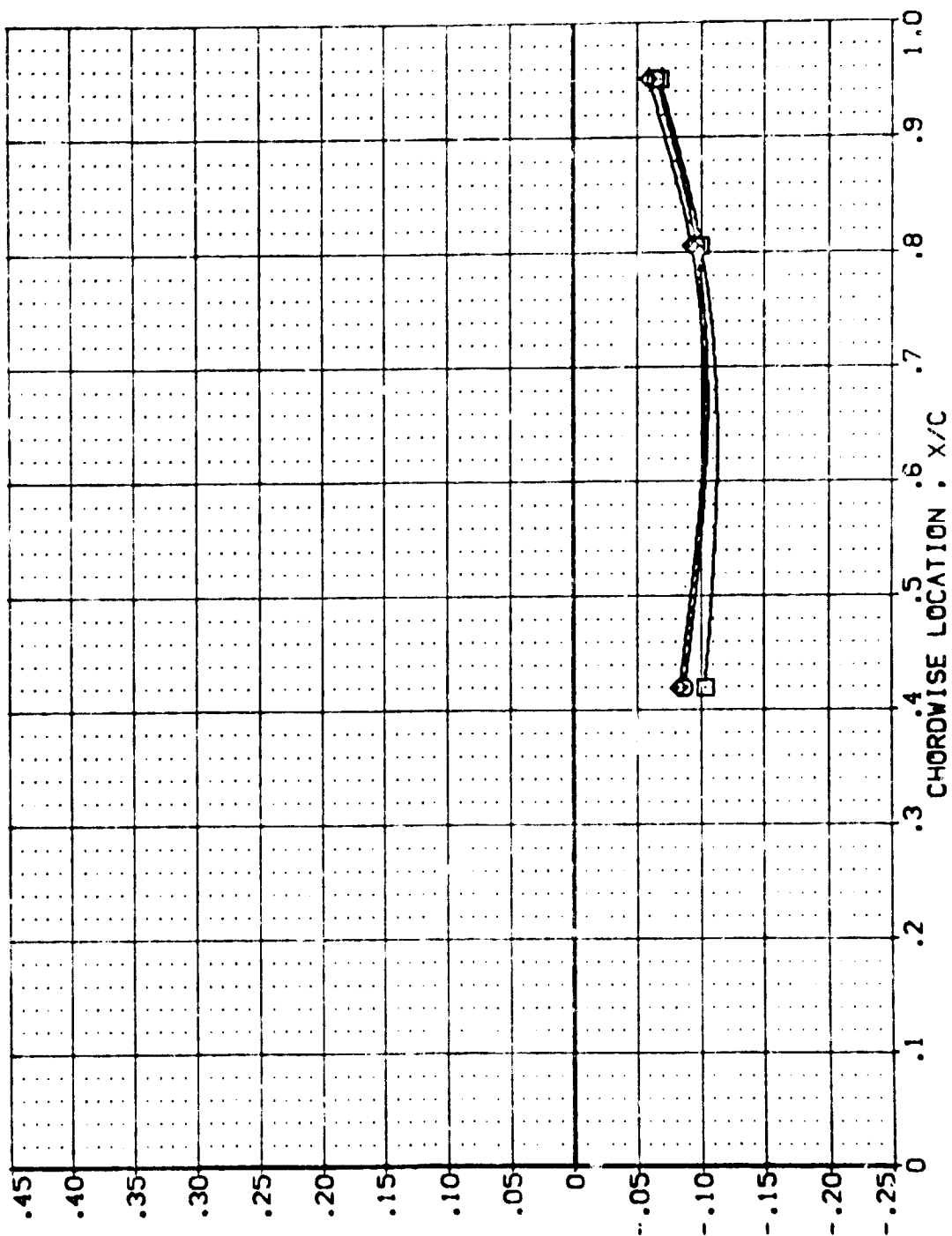
IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

UPPER LPM
UPPER LPM
UPPER LPM

SC-PR

GIMBAL
4.000
1.000
3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

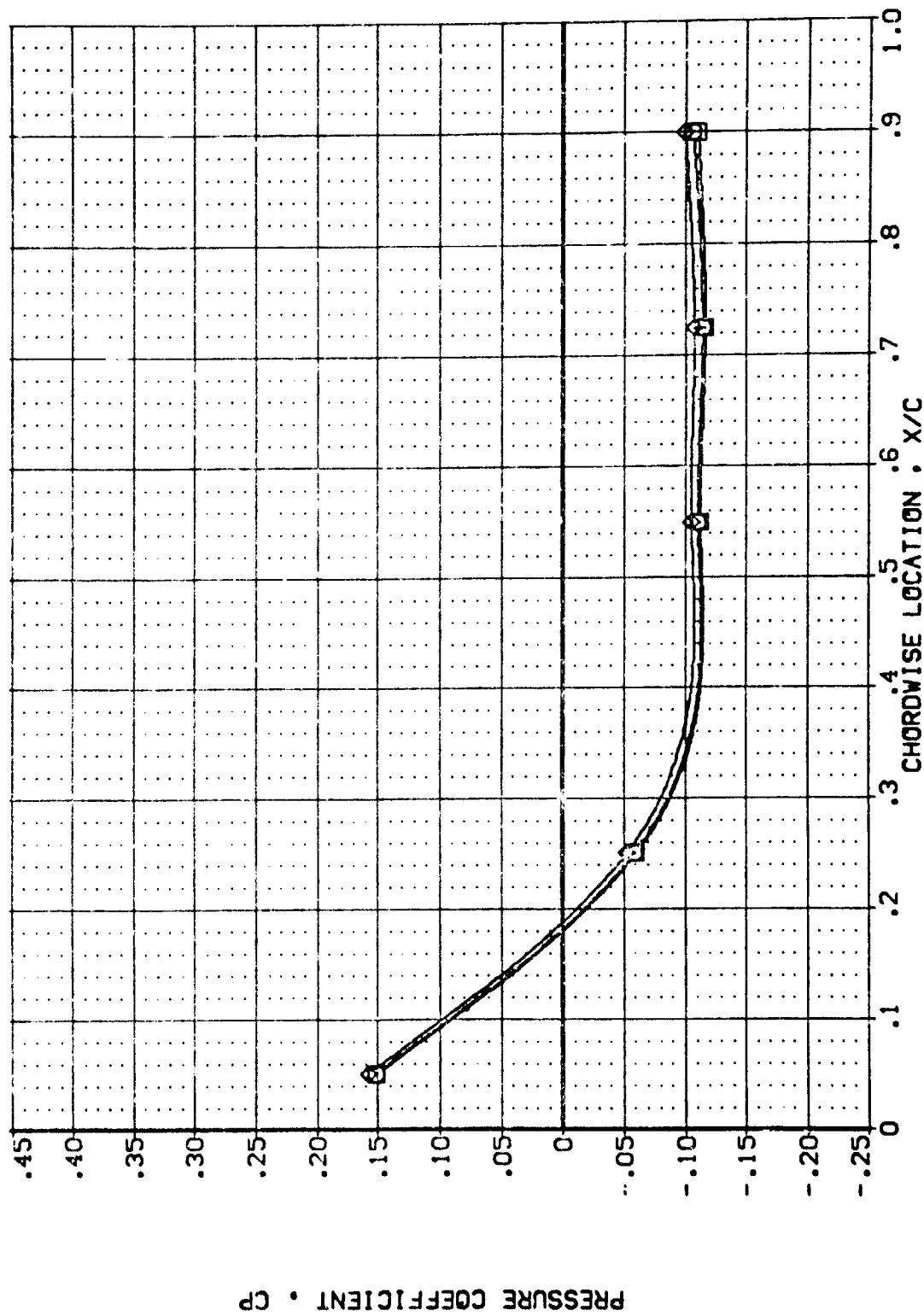
MACH = 3.000 ALPHA = .000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR STPR GIMBAL

(L32102) AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE .000 .000 4.000

(L32038) AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE .000 .000 1.000

(L32036) AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE .000 .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

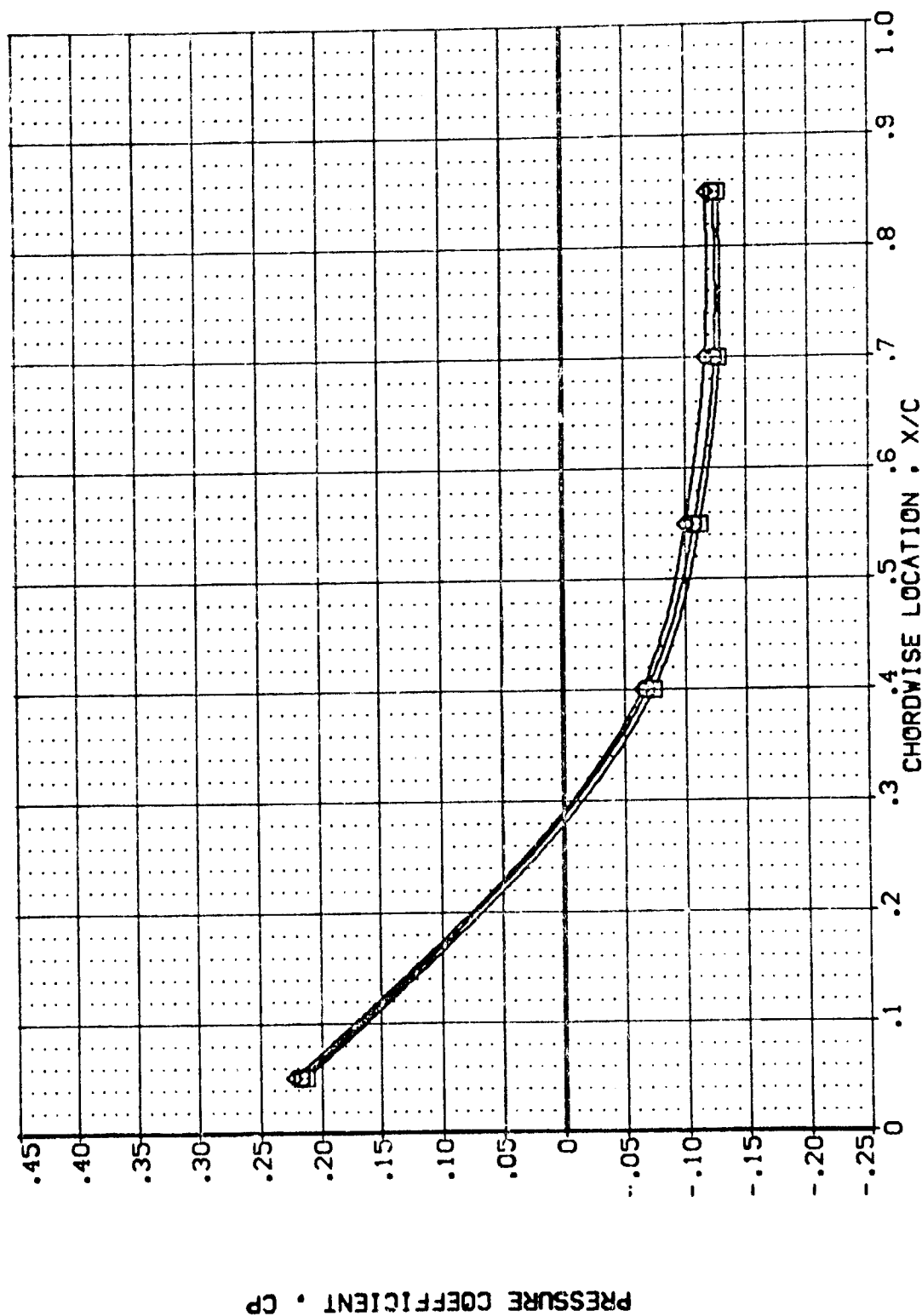
MACH = 3.000 ALPHA = .000 Y/B = .534 PAGE 423

DATA SET NAME: CONFIGURATION DESCRIPTION

(UBZ102)
(UBZ039)
(UBZ065)

AVES 87-710 | A12C 01 T1 S1 | UPPER WING PRESSURE
AVES 87-710 | A12C 01 T1 S1 | UPPER WING PRESSURE
AVES 87-710 | A12C 01 T1 S1 | UPPER WING PRESSURE

POWER CTR 50-PR GIMBAL
.000
.000
3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .673

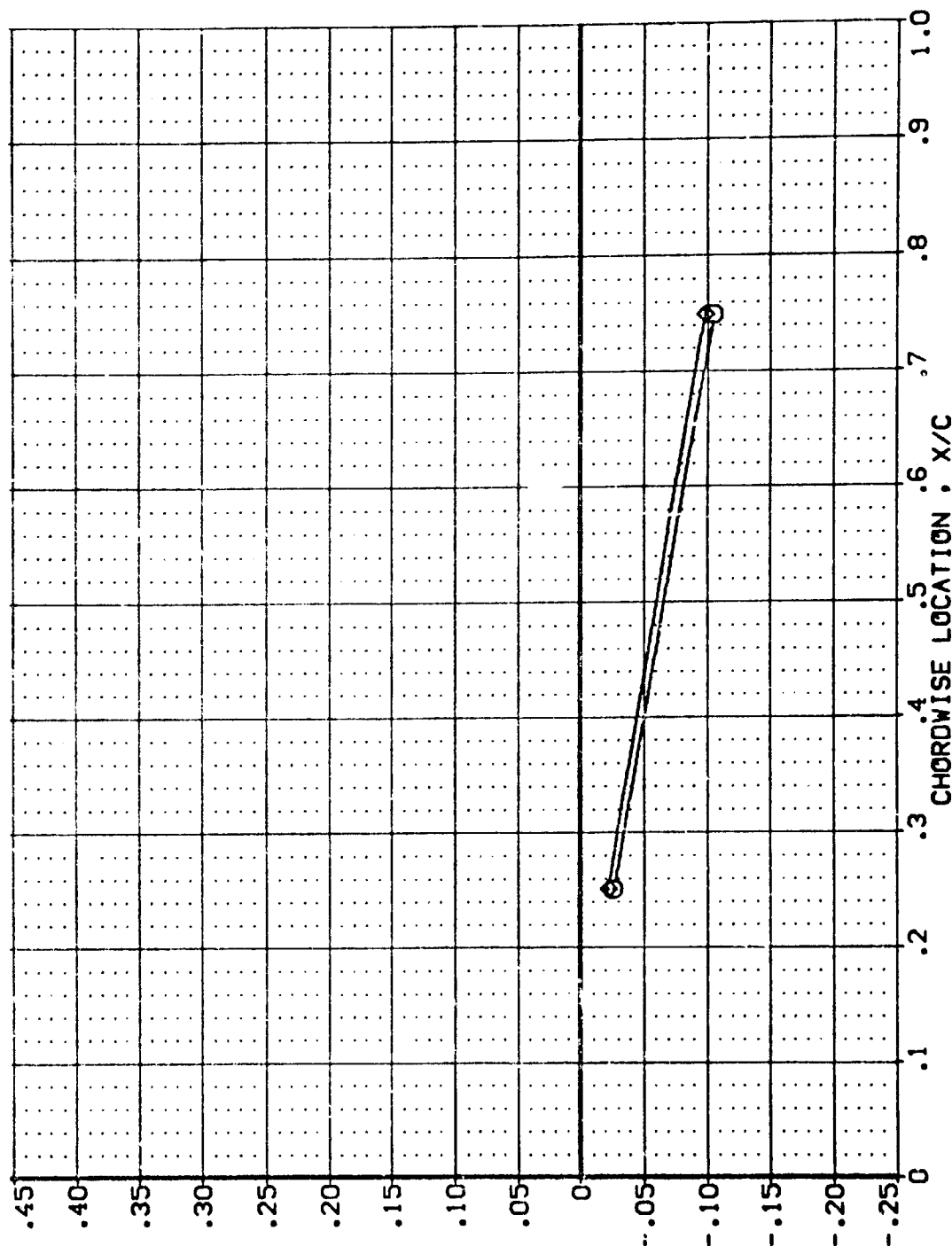
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(U2102)
(U2039)
(U2065)

AMES 87-710 [A]ZC [O] T1 S1 UPPER WING PRESSURE
AMES 87-710 [A]ZC [O] T1 S1 UPPER WING PRESSURE
AMES 87-710 [A]ZC [O] T1 S1 UPPER WING PRESSURE

POWER GPR SGRPR GIMBAL
.000
.000
4.000
1.000
3.000

PRESSURE COEFFICIENT • CP



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ102)
(UBZ038)
(UBZ085)

AMES 87-710
AMES 87-710
AMES 87-710

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

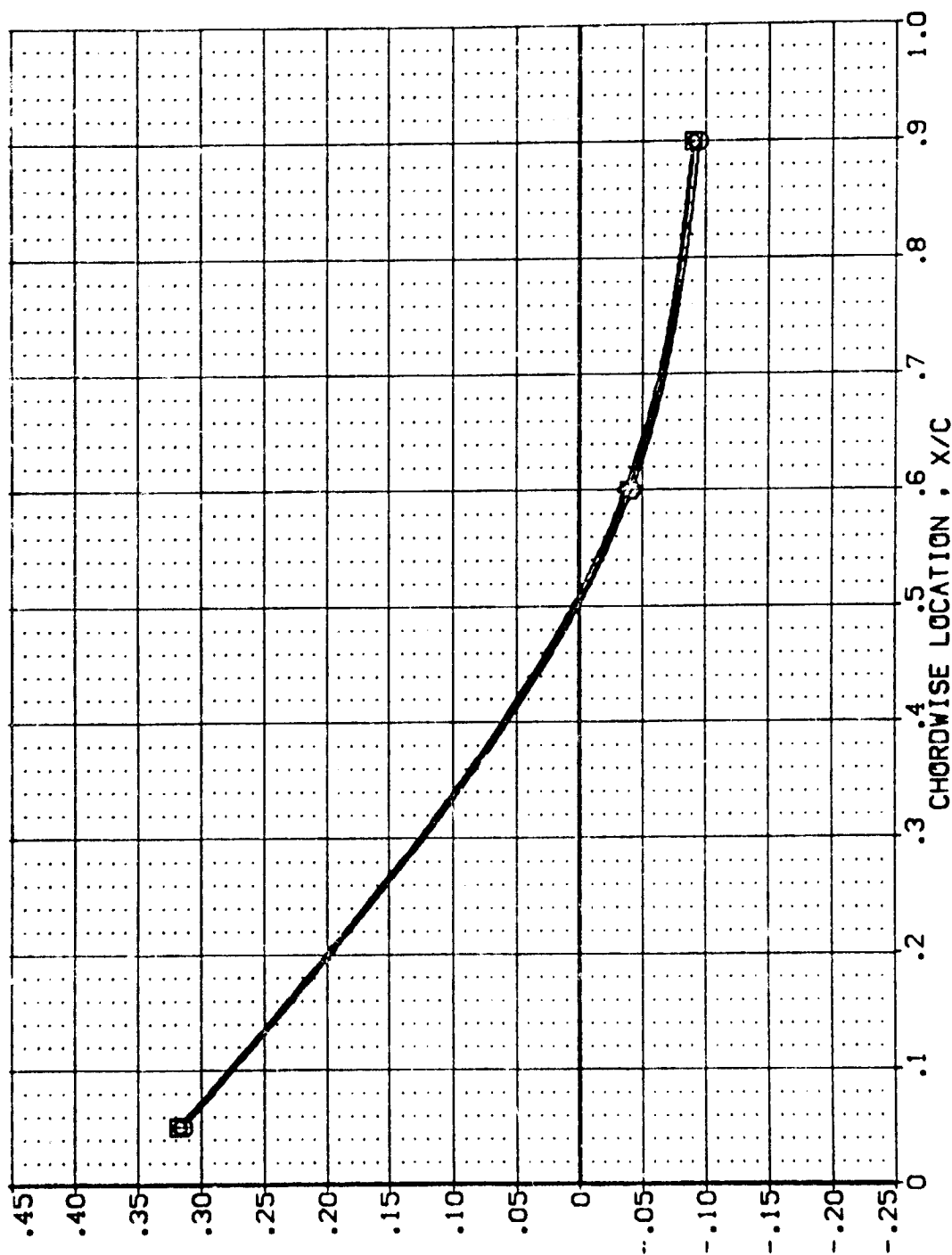
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER CTR

.000
.000
.000

SEVER

GIMBAL
1.000
1.000
3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .887

PAGE 426

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ102)
(UBZ038)
(UBZ065)

AVES 87-710 IAI XC OI T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI XC OI T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI XC OI T1 S1 UPPER WING PRESSURE

POWER 0.000
POWER 0.000
POWER 0.000

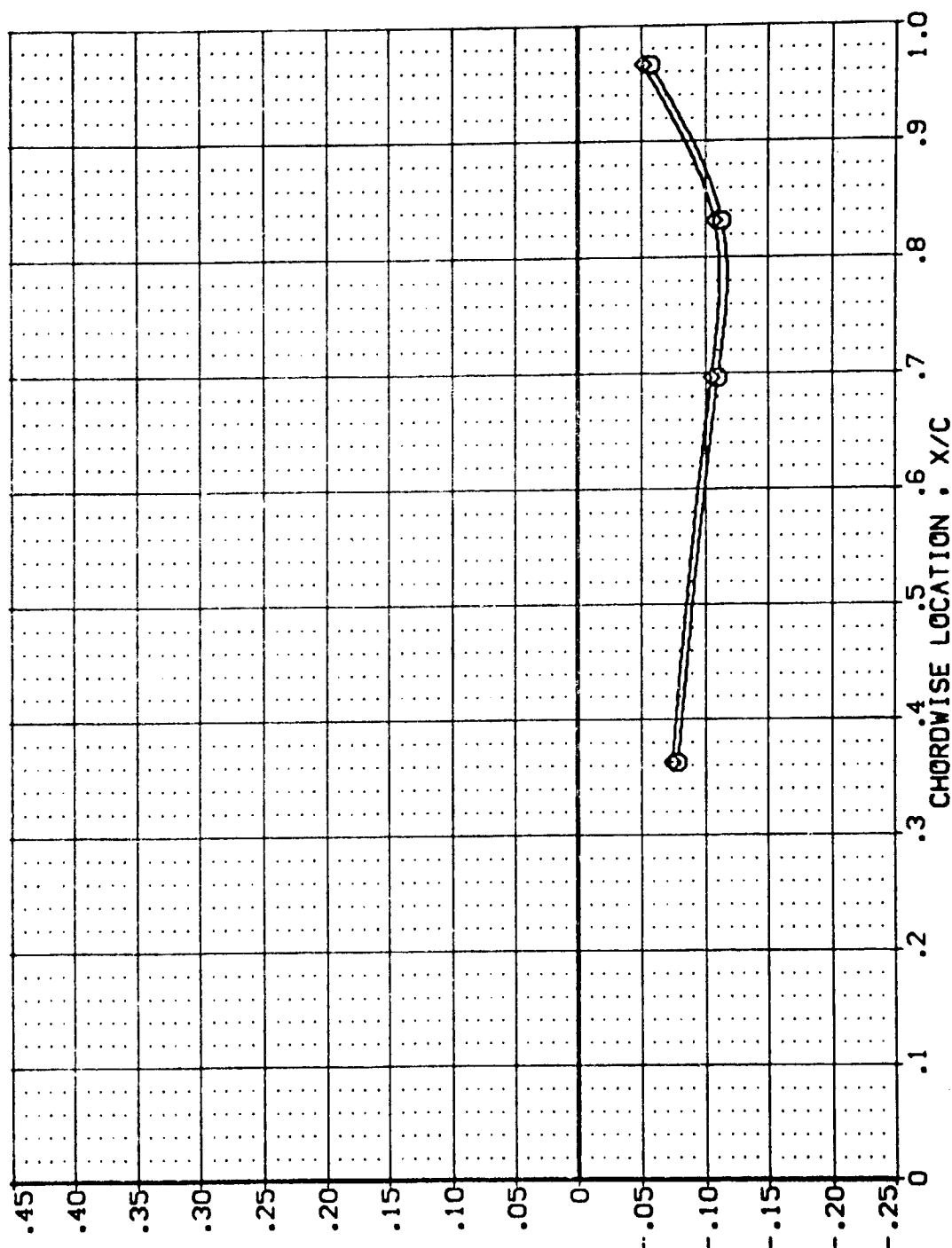
SPWR

OF R

GIMBAL

4.000
1.000
3.000

PRESSURE COEFFICIENT • CP



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .299

PAGE 427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ102)
(UBZ038)
(UBZ085)

AMES 87-710
AMES 87-710
AMES 87-710

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

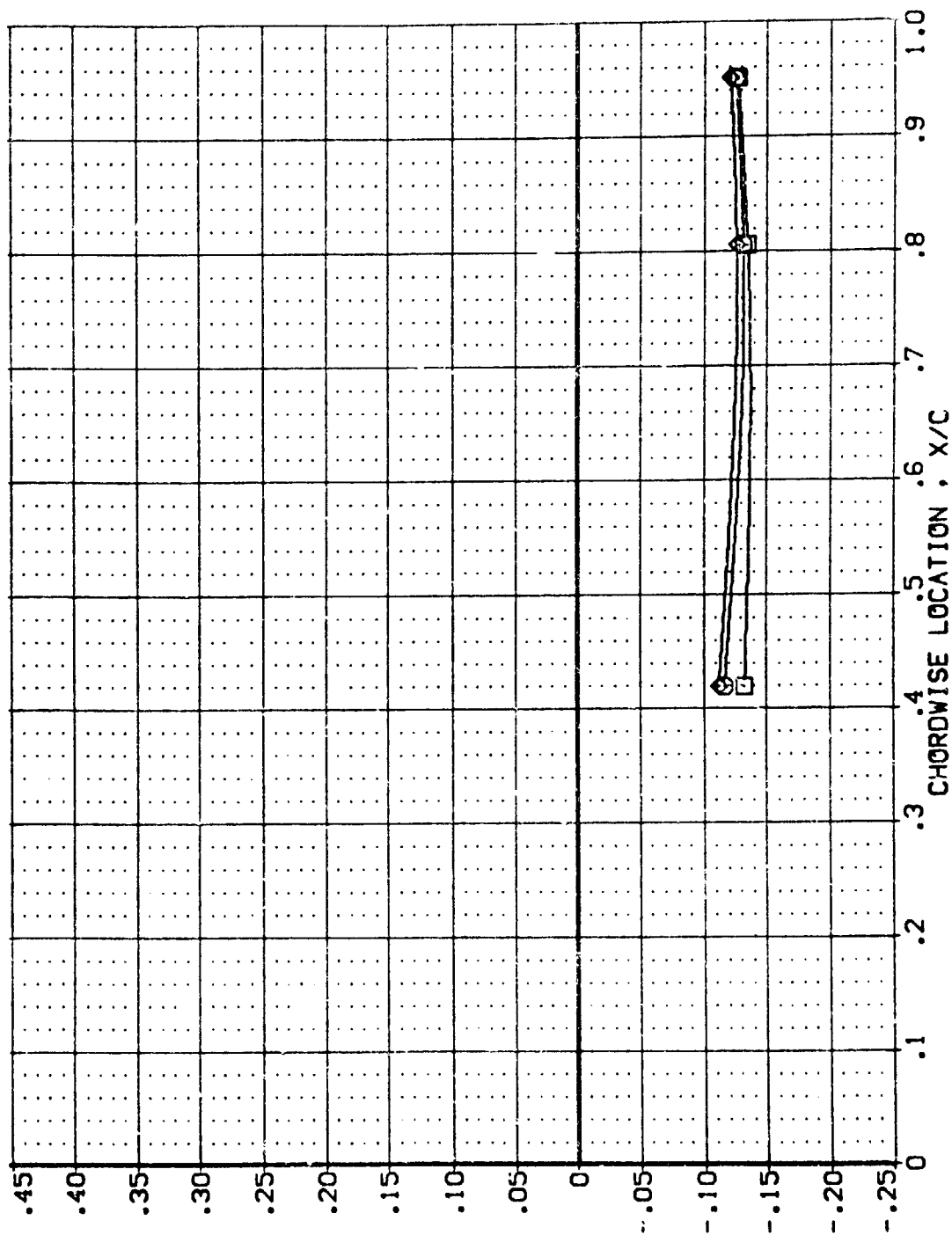
POWER 0.000
POWER 0.000
POWER 0.000

50-PR

0-PR

GIMBAL
4.000
1.000
3.000

PRESSURE COEFFICIENT, CP



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .427

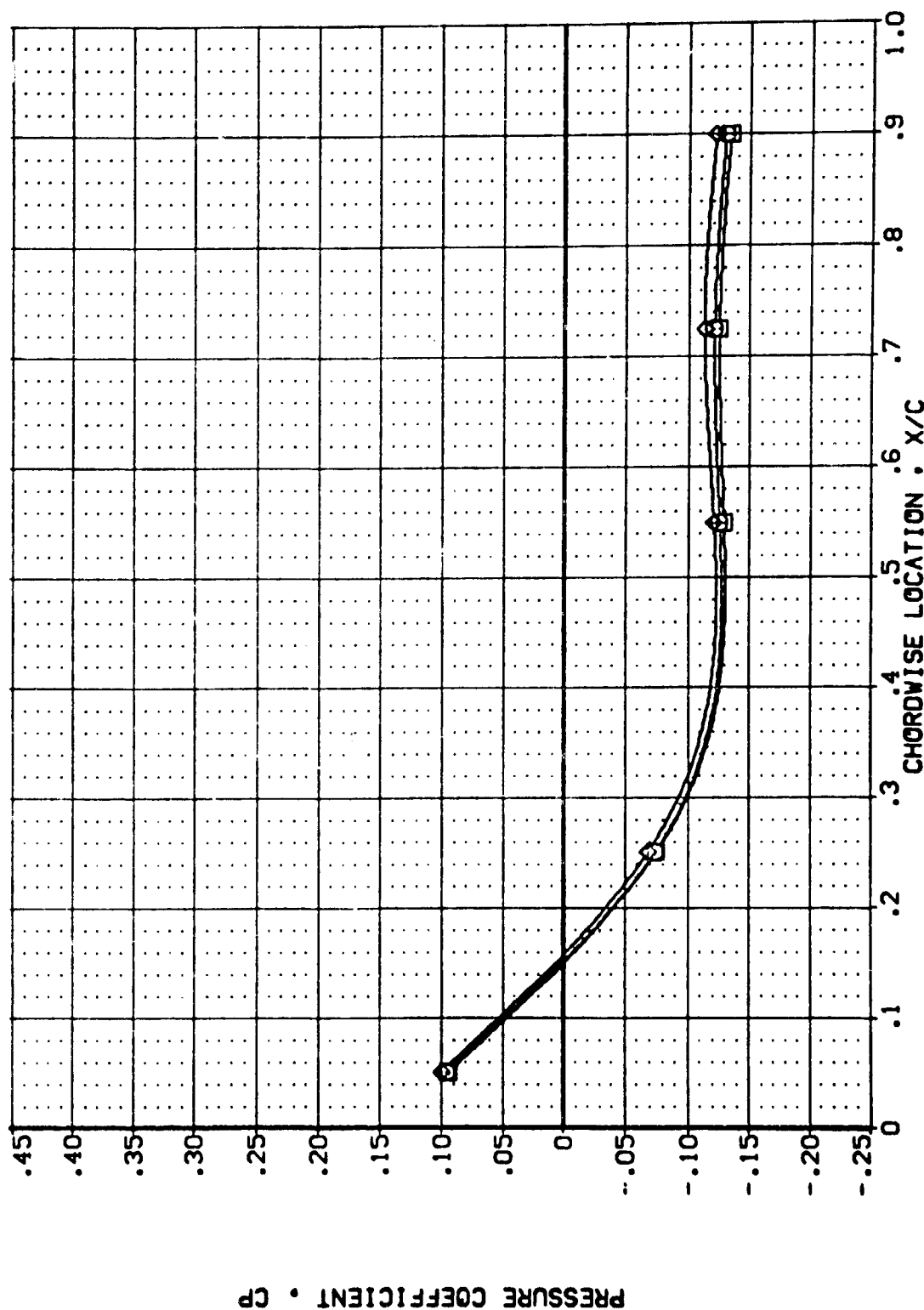
PAGE 428

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ102)
(LBZ038)
(LBZ065)

AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE
AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE
AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE

POWER .000
CFR .000
SWPR .000
GIMBAL 4.000
1.000
3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

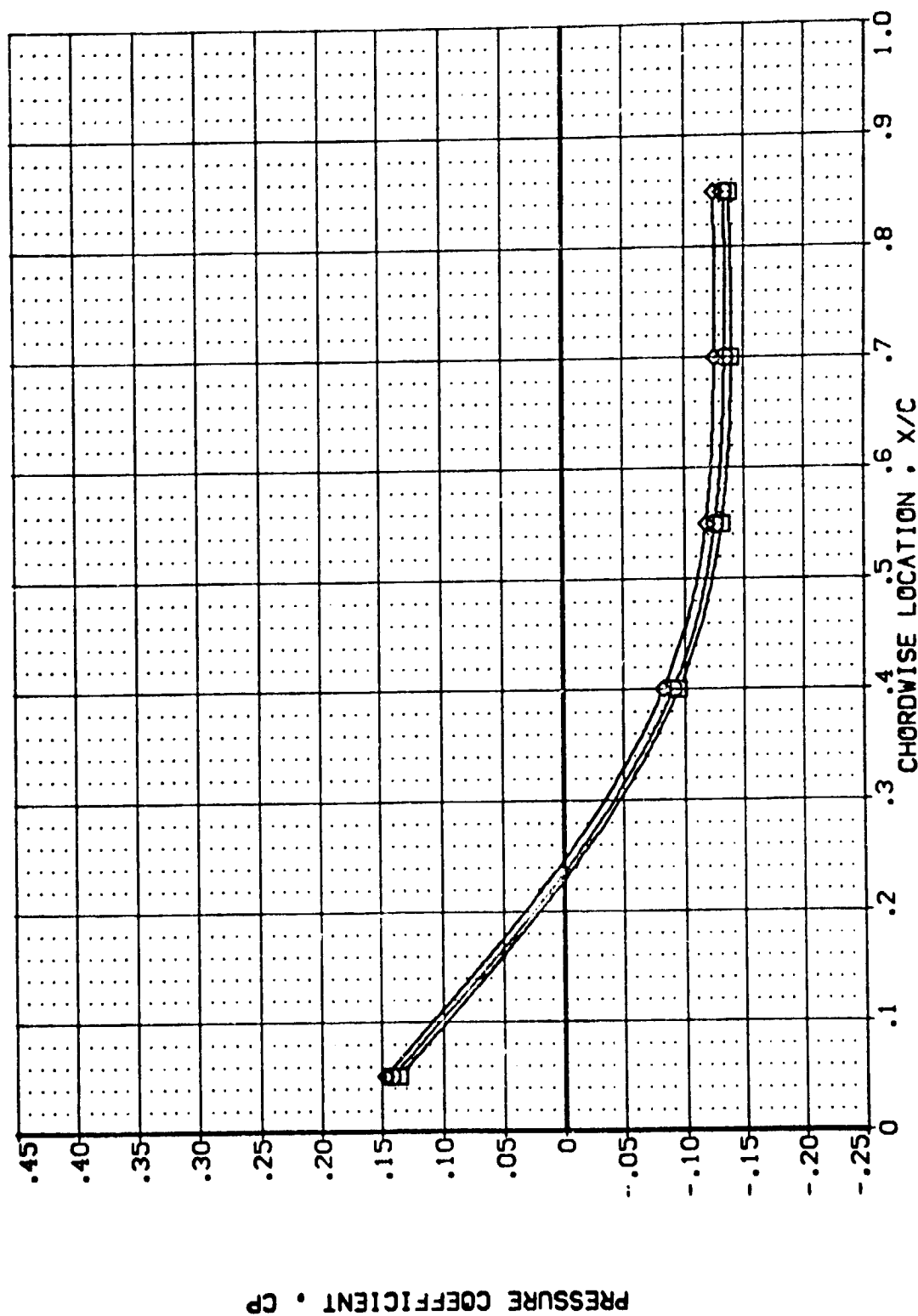
MACH = 3.000 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/P-PR GIMBAL

(UBZ102) ASES 87-710 IA12C 01 T1 S1 UPPER WING PRESSURE .000 .000 4.000

(UBZ038) ASES 87-710 IA12C 01 T1 S1 UPPER WING PRESSURE .000 .000 1.000

(UBZ085) ASES 87-710 IA12C 01 T1 S1 UPPER WING PRESSURE .000 .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .673

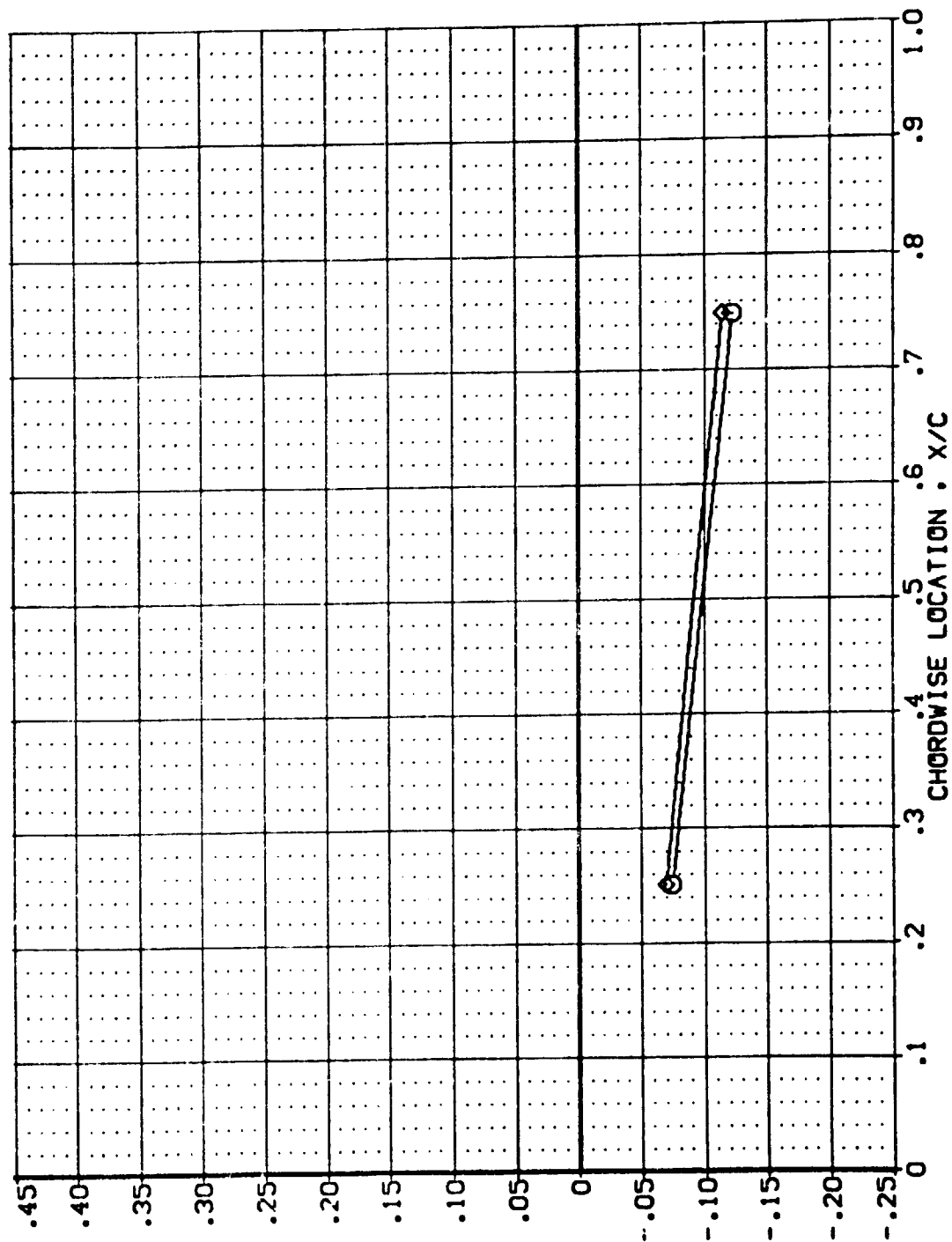
PAGE 430

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SRRR GIMBAL

(UBZ102) AYES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE .000 .000 4.000

(UBZ028) AYES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE .000 .000 1.000

(UBZ065) AYES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE .000 .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

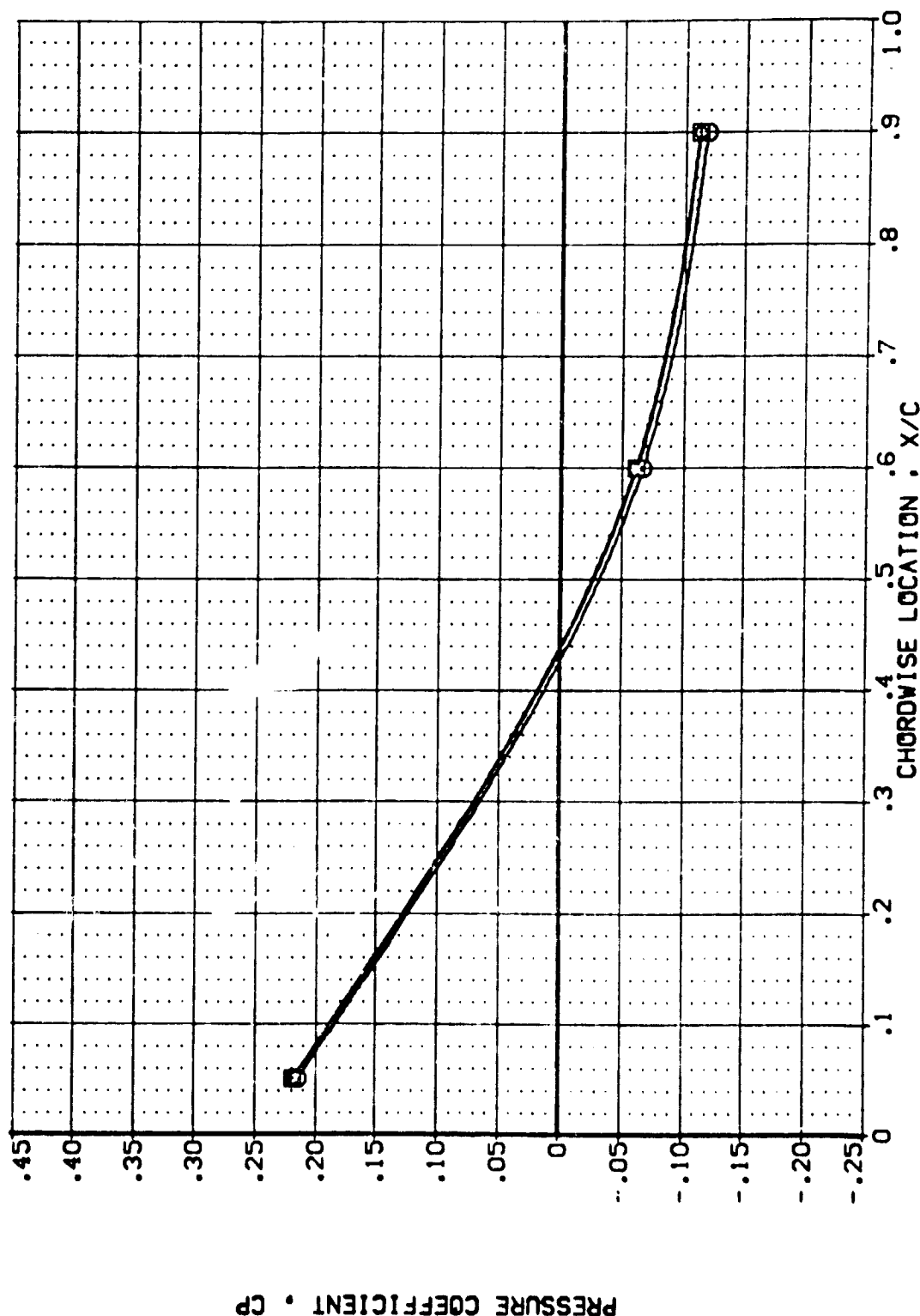
MACH = 3.000 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ102)
(UBZ038)
(UBZ085)

AVES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE

POWER GPR SAPPR GIMBAL
.000
.000
3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2106)
(UB2046)
(UB2039)

AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

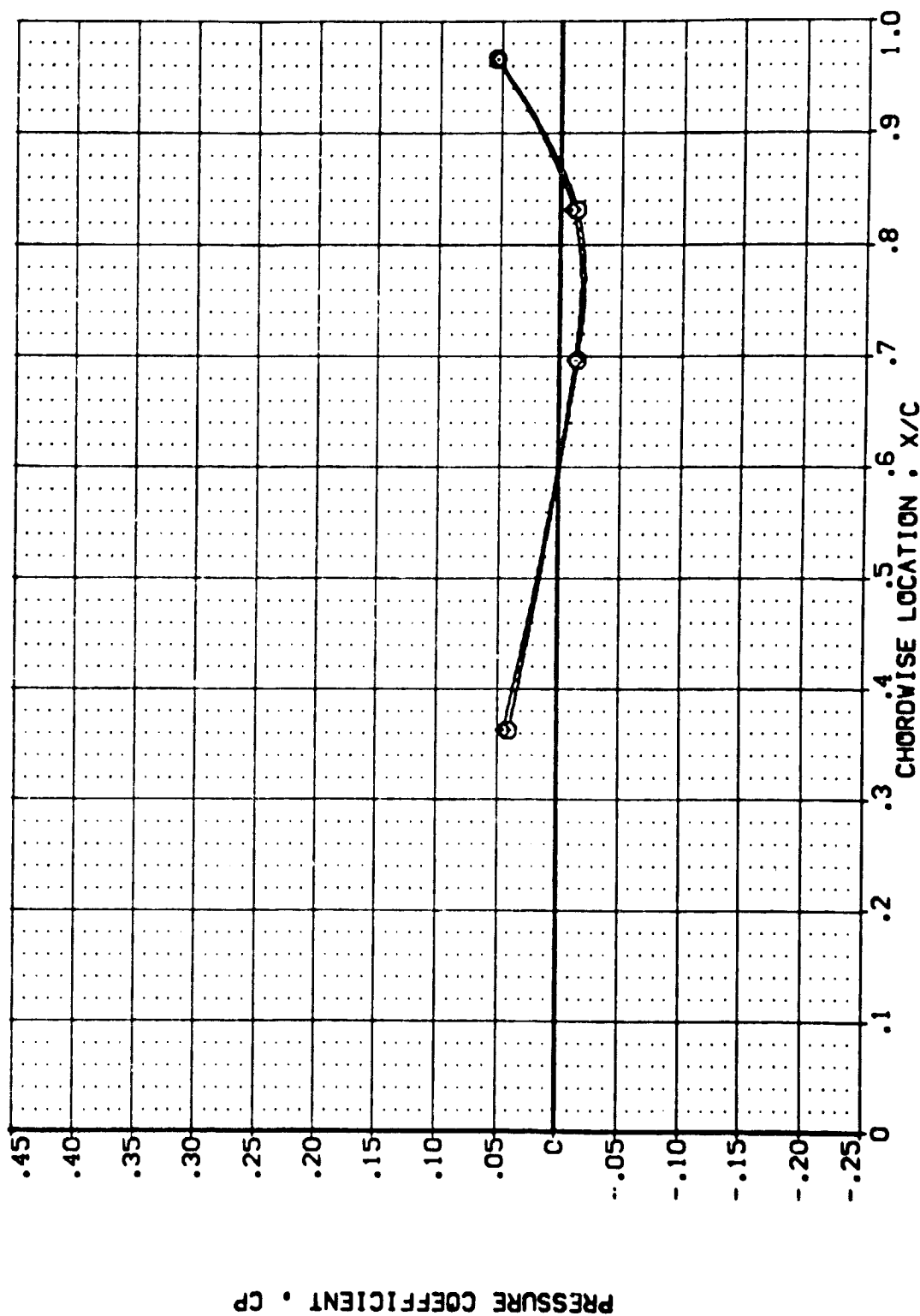
POWER 0.000
0.000
0.000

SWPR

0.00

GIMBAL

4.000
1.000
3.000

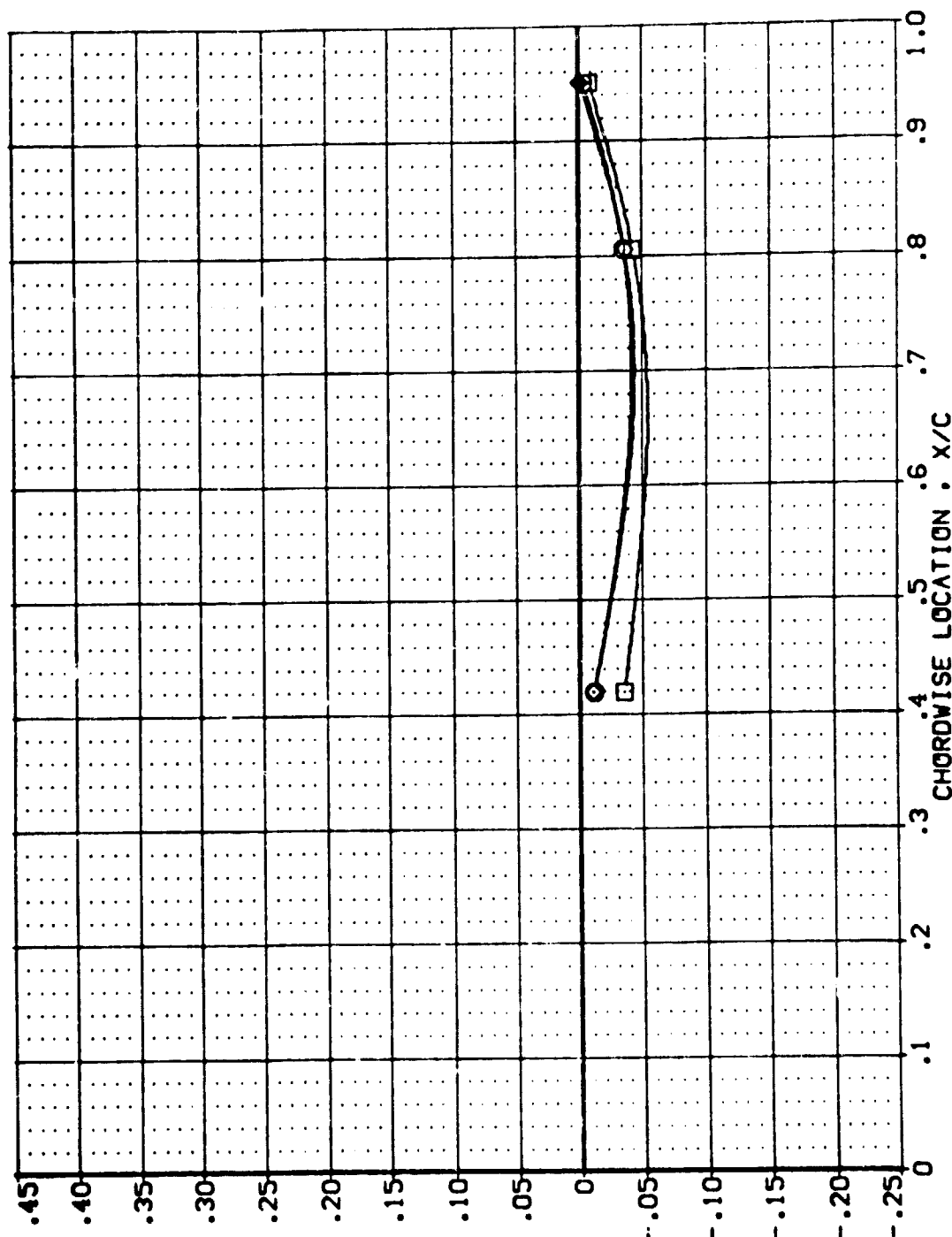


POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZ106) AYES 07-710 IAI2C 01 TI SI UPPER WING PRESSURE
 (UBZ048) AYES 07-710 IAI2C 01 TI SI UPPER WING PRESSURE
 (UBZ008) AYES 07-710 IAI2C 01 TI SI UPPER WING PRESSURE

POWER 0.000
 SPR 0.000
 GIMBAL 4.000
 1.000
 3.000

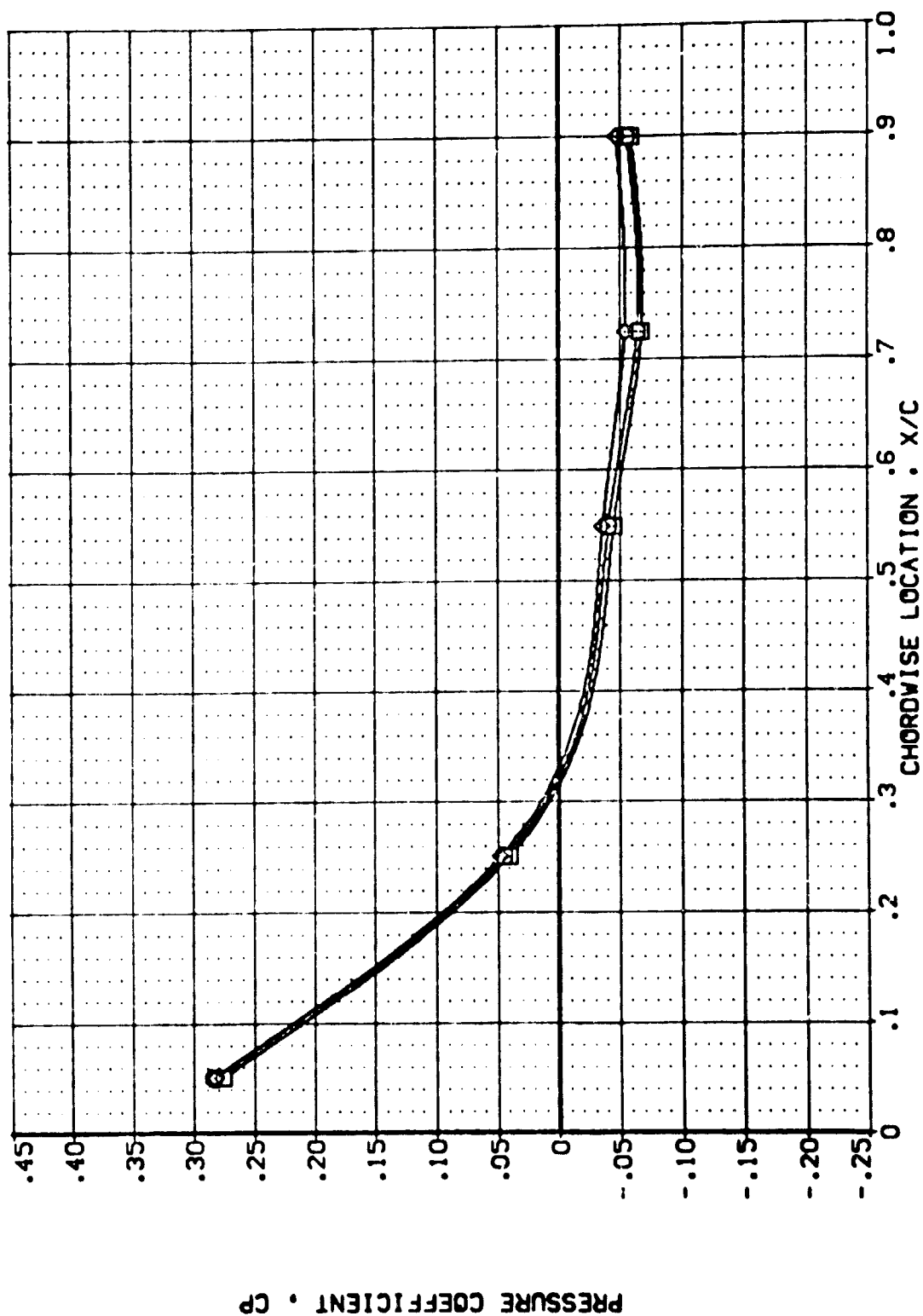


POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .427

PAGE 434

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SPRPR	GIMBAL
(192106)	AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	.000			1.000
(UB2046)	AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	.000			1.000
(UB2008)	AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	.000			3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ105)
(UBZ046)
(UBZ008)

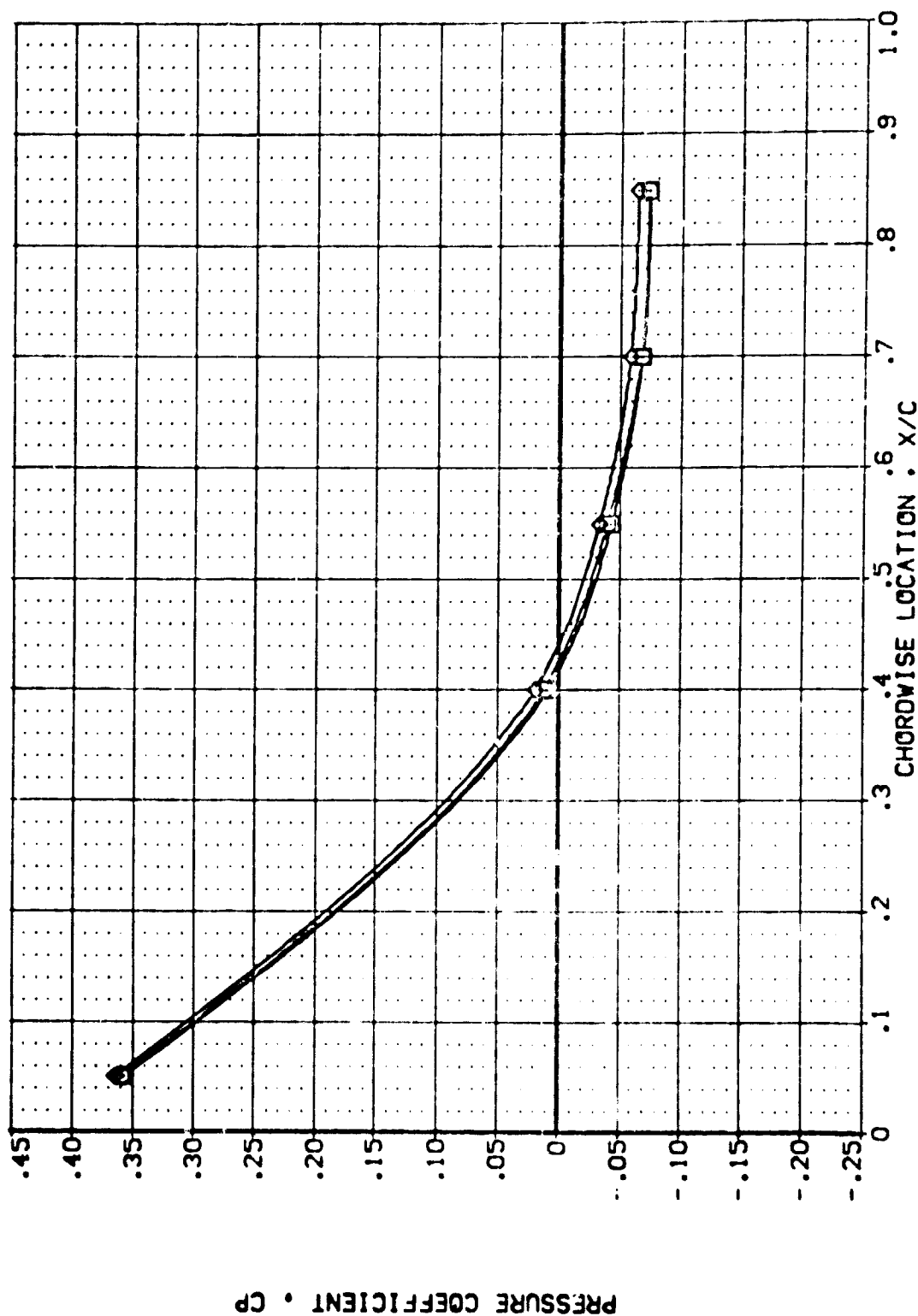
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER 0.000
0.000
0.000

SP-PR

OPR

GIMBAL
4.000
1.000
3.000

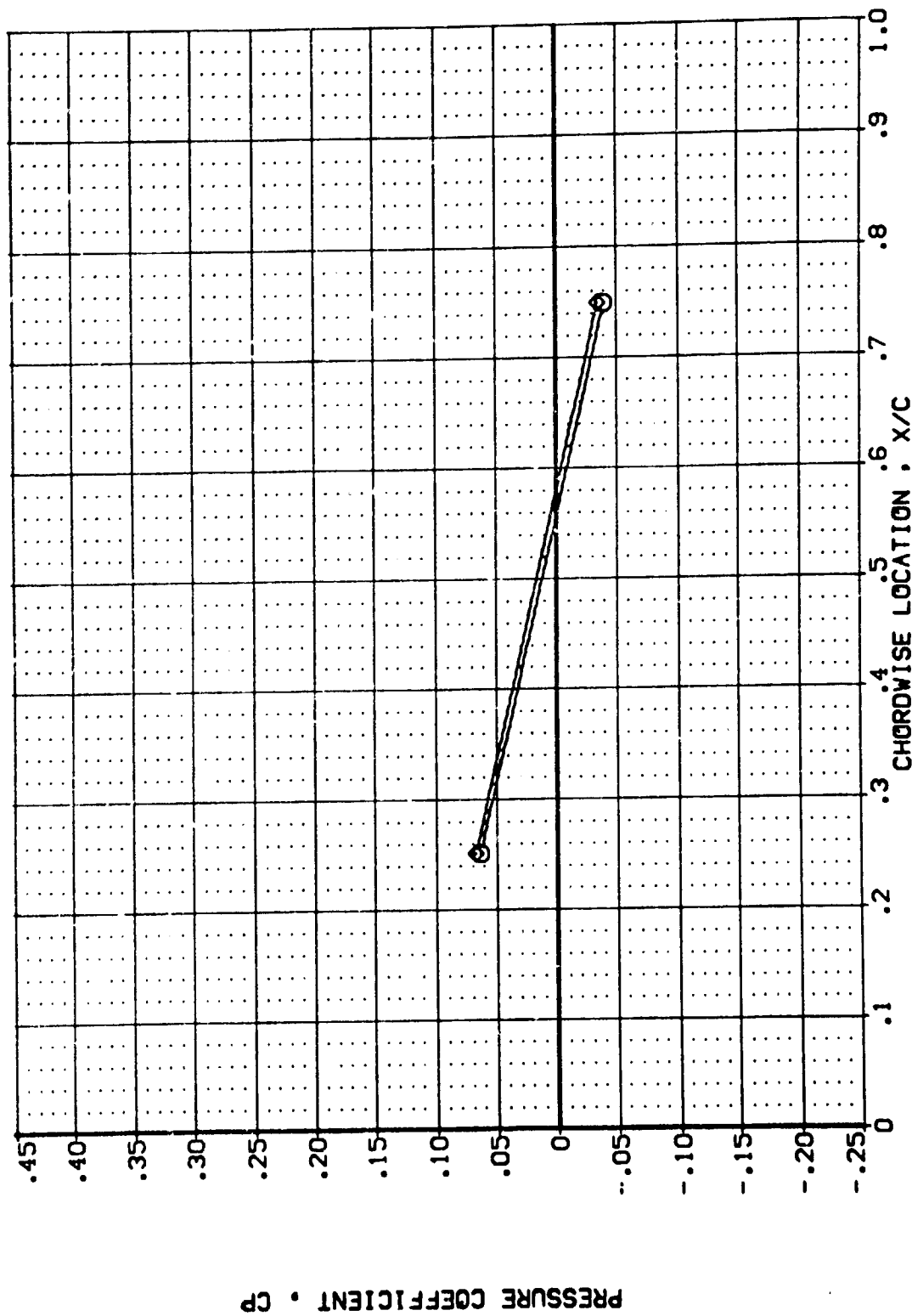


POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .673

PAGE 436

DATA SET SYMBOL: (UBZ10S) (UBZ046) (UBZ088)
 CONFIGURATION DESCRIPTION: ASES 87-710 IA12C 01 T1 S1 UPPER WING PRESSURE
 ASES 87-710 IA12C 01 T1 S1 UPPER WING PRESSURE
 ASES 87-710 IA12C 01 T1 S1 UPPER WING PRESSURE
 POWER: .000 .000 .000
 GIMBAL: 4.000 1.000 3.000



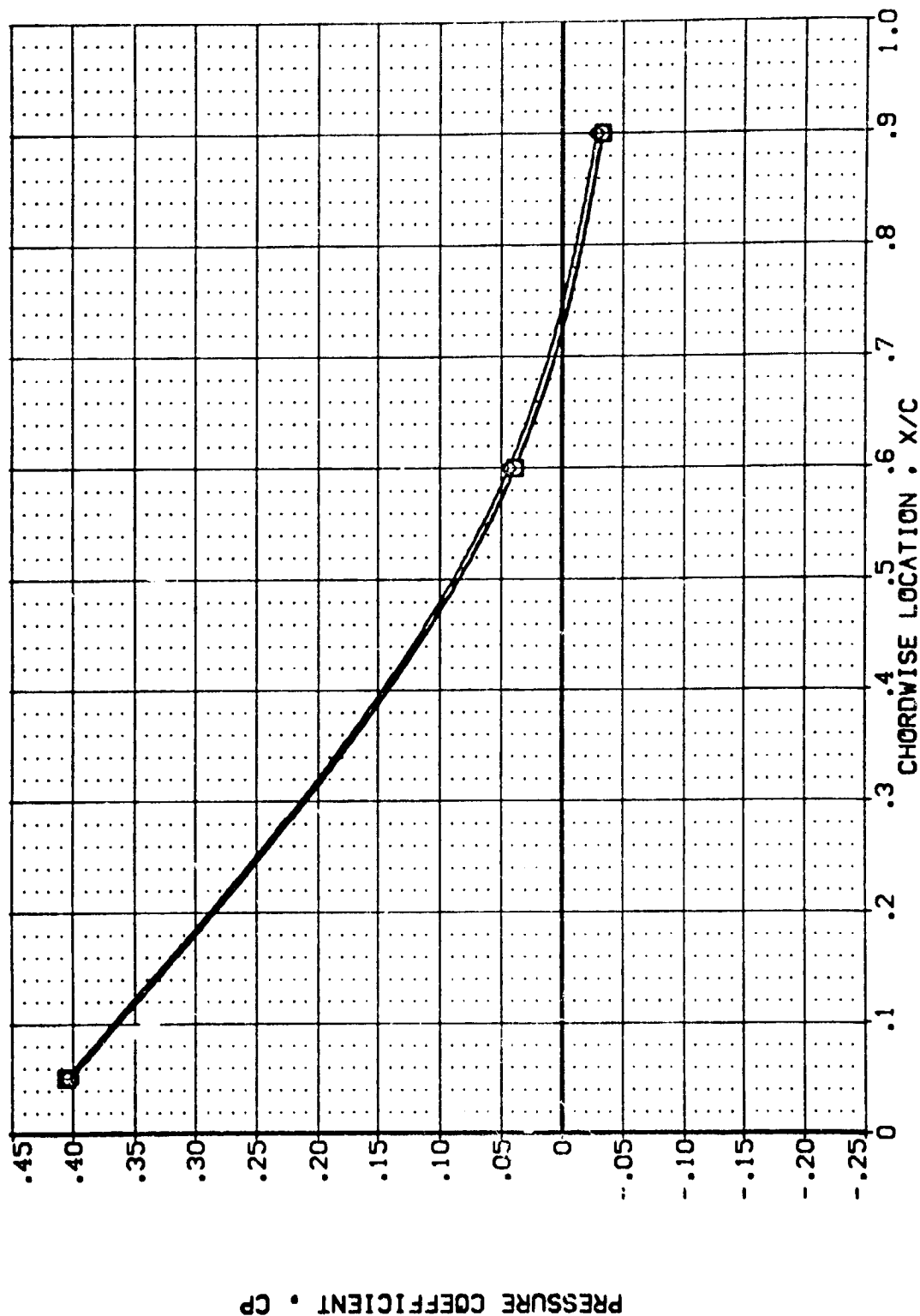
POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .780 PAGE 437

DATA SET 7/MBOL
 (UBZ106)
 (UBZ046)
 (UBZ088)

CONFIGURATION DESCRIPTION
 ARES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 ARES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 ARES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER DPR SR PR GIMBAL
 .000
 .000
 .000
 4.000
 1.000
 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

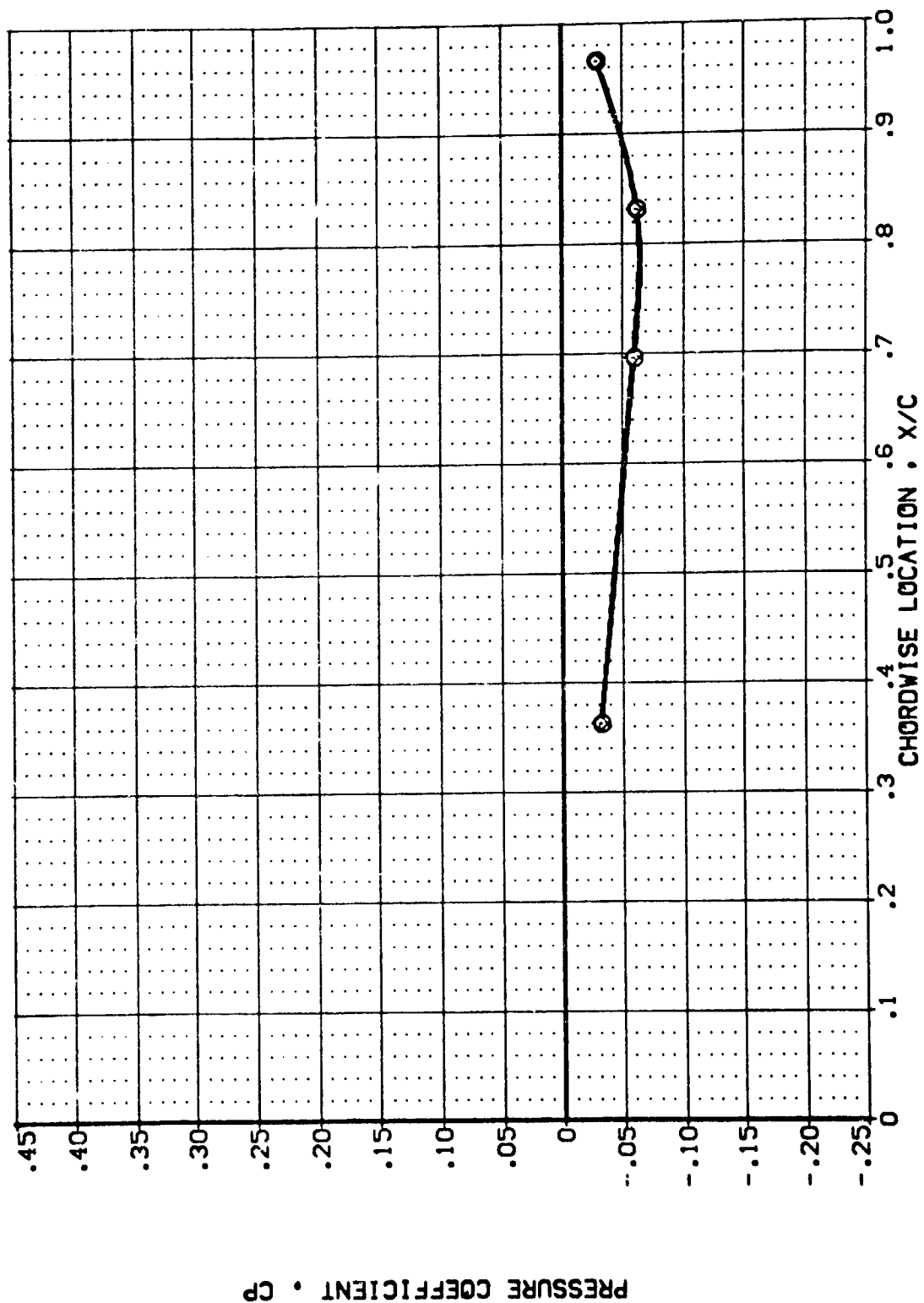
MACH = 3.500 ALPHA = -8.000 Y/B = .887 PAGE 438

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SRRR GIMBAL

(UBZ106) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 .000 4.000

(UBZ046) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 .000 1.000

(UBZ089) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

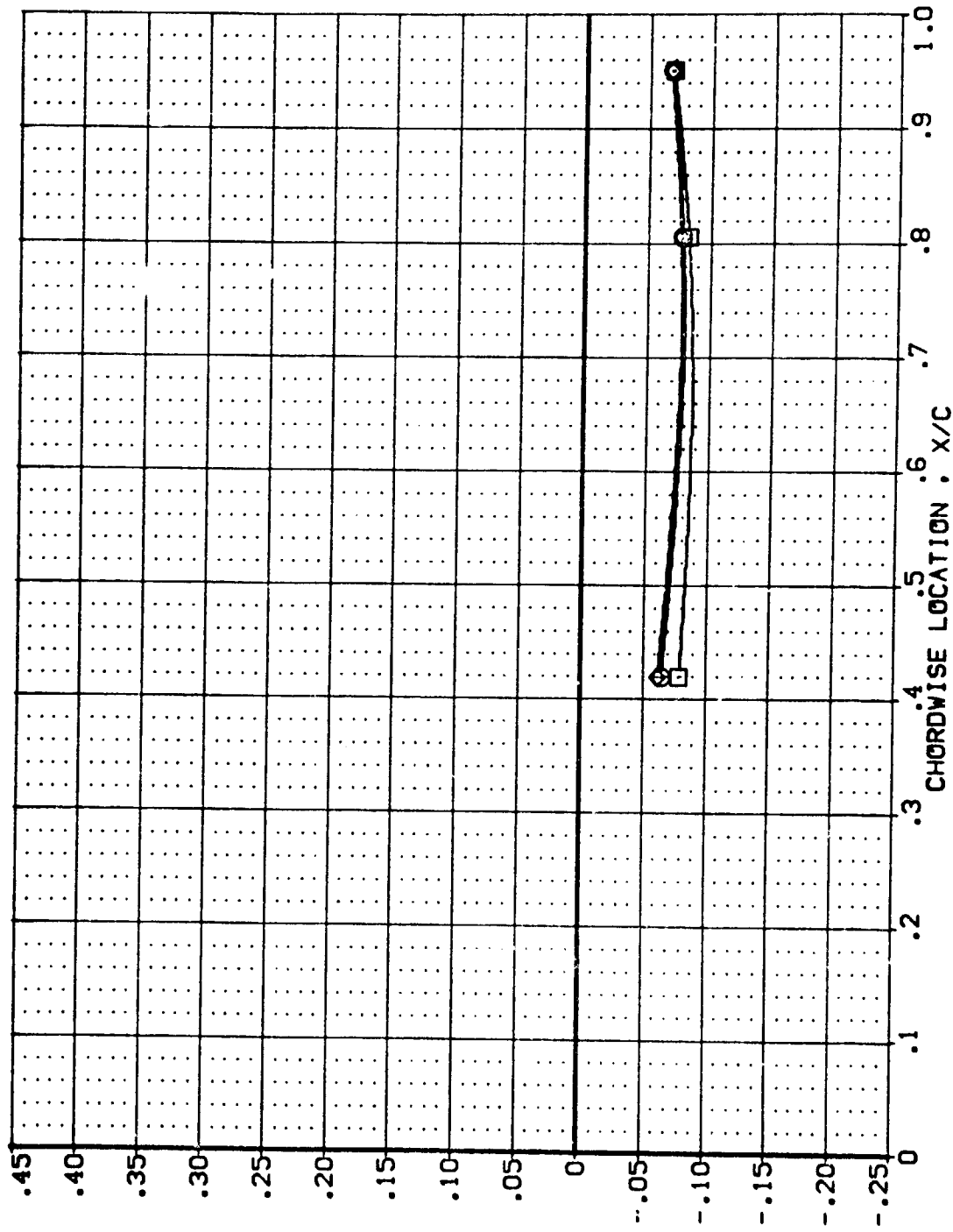
MACH = 3.500 ALPHA = .000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ106)
(UBZ046)
(UBZ089)

AMES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE

POWER 0.000
DPR 0.000
SOFPR 0.000
GIMBAL 4.000
1.000
3.000



PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

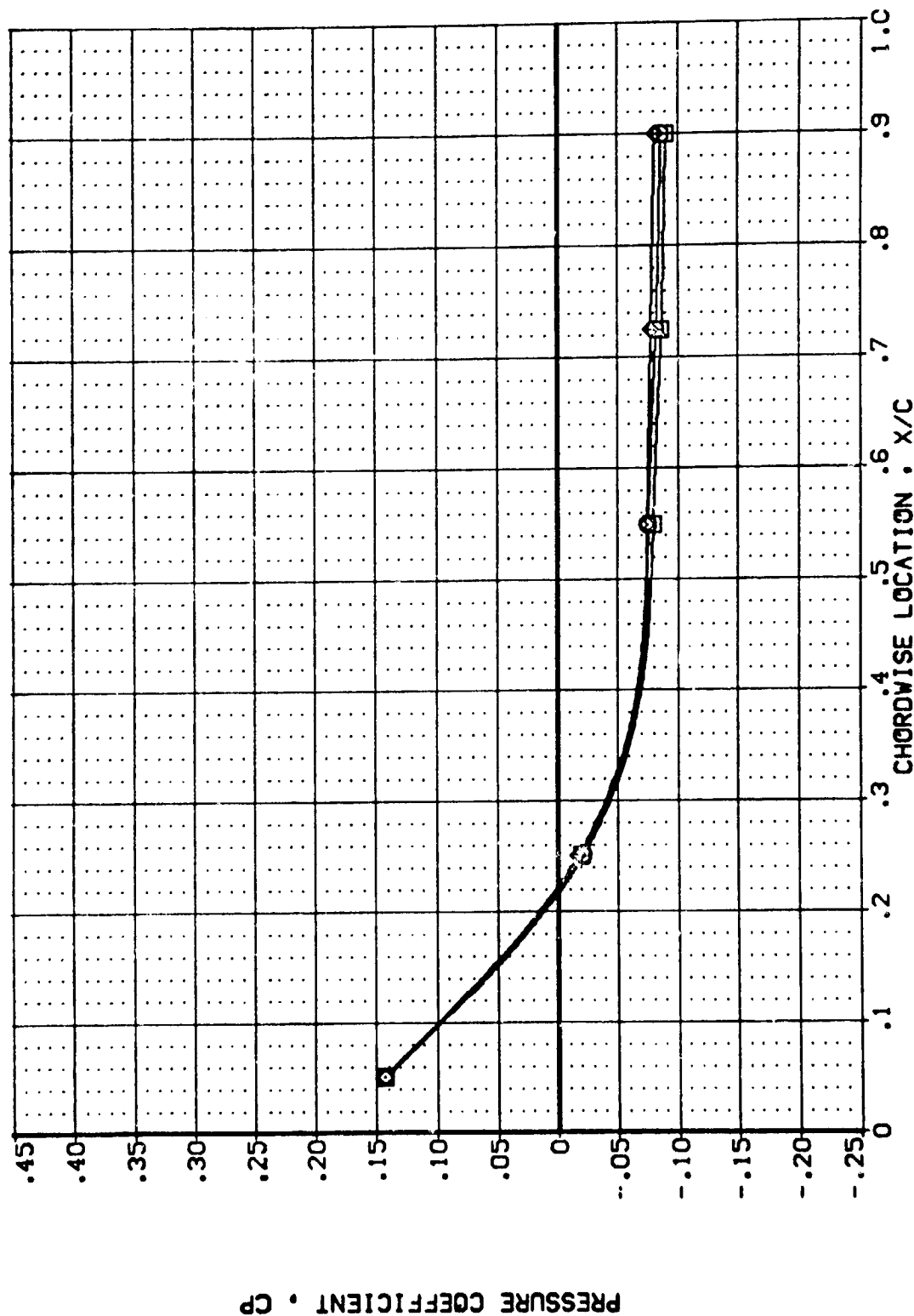
MACH = 3.500 ALPHA = 0.000 Y/B = 0.427

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/P/R GIMBAL

{ LBZ106 } AHES 87-710 |A12C 01 T1 S1 UPPER WING PRESSURE .000 .000 4.000

{ LBZ046 } AHES 87-710 |A12C 01 T1 S1 UPPER WING PRESSURE .000 .000 1.000

{ LBZ089 } AHES 87-710 |A12C 01 T1 S1 UPPER WING PRESSURE .000 .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ105)
(UBZ045)
(UBZ069)

AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER 0.000
0.000
0.000

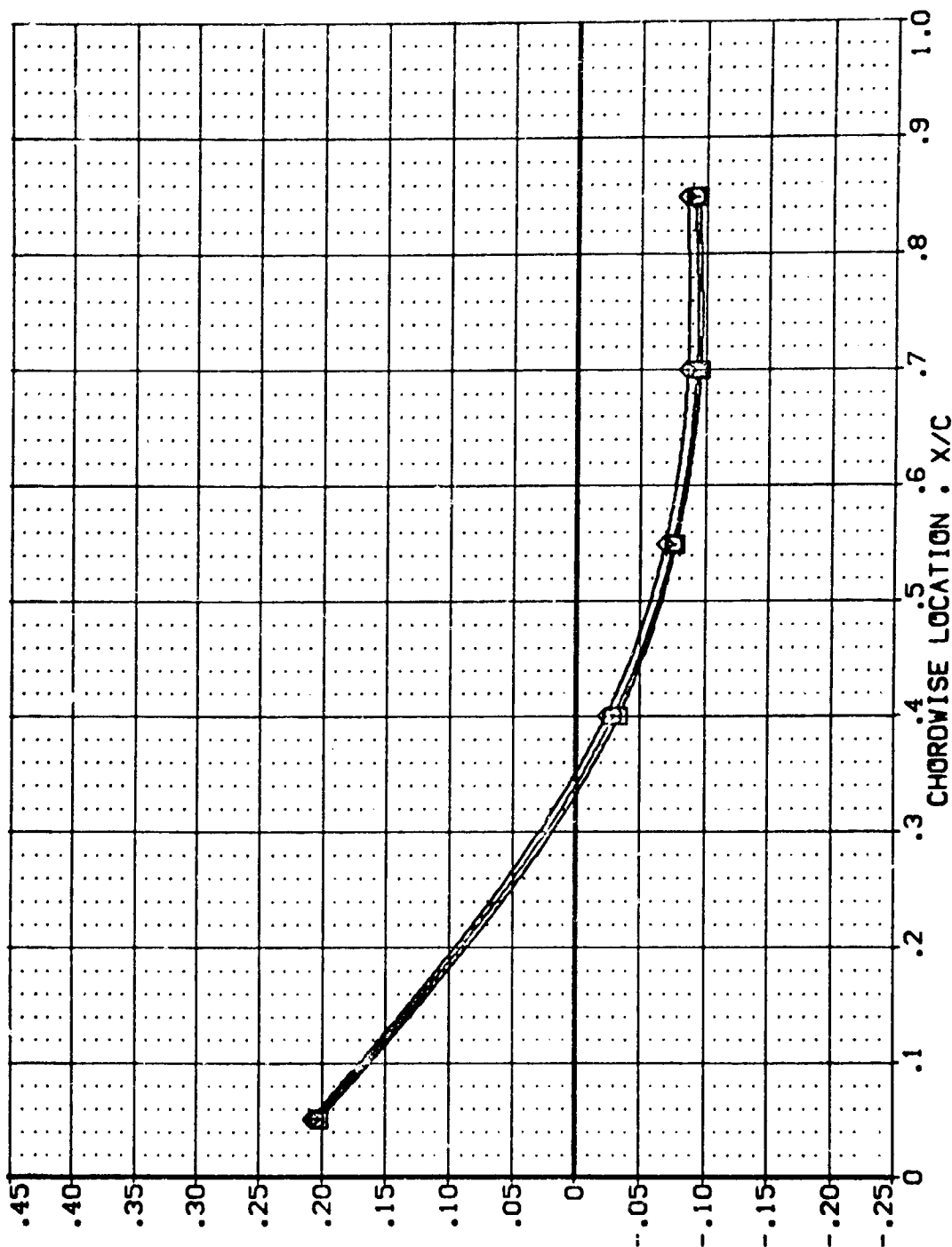
SWPR

OPR

GIMBAL

4.000
1.000
3.000

PRESSURE COEFFICIENT, CP



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .673

PAGE 442

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(182106)
(182106)
(182106)

AMES 87-710
AMES 87-710
AMES 87-710

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

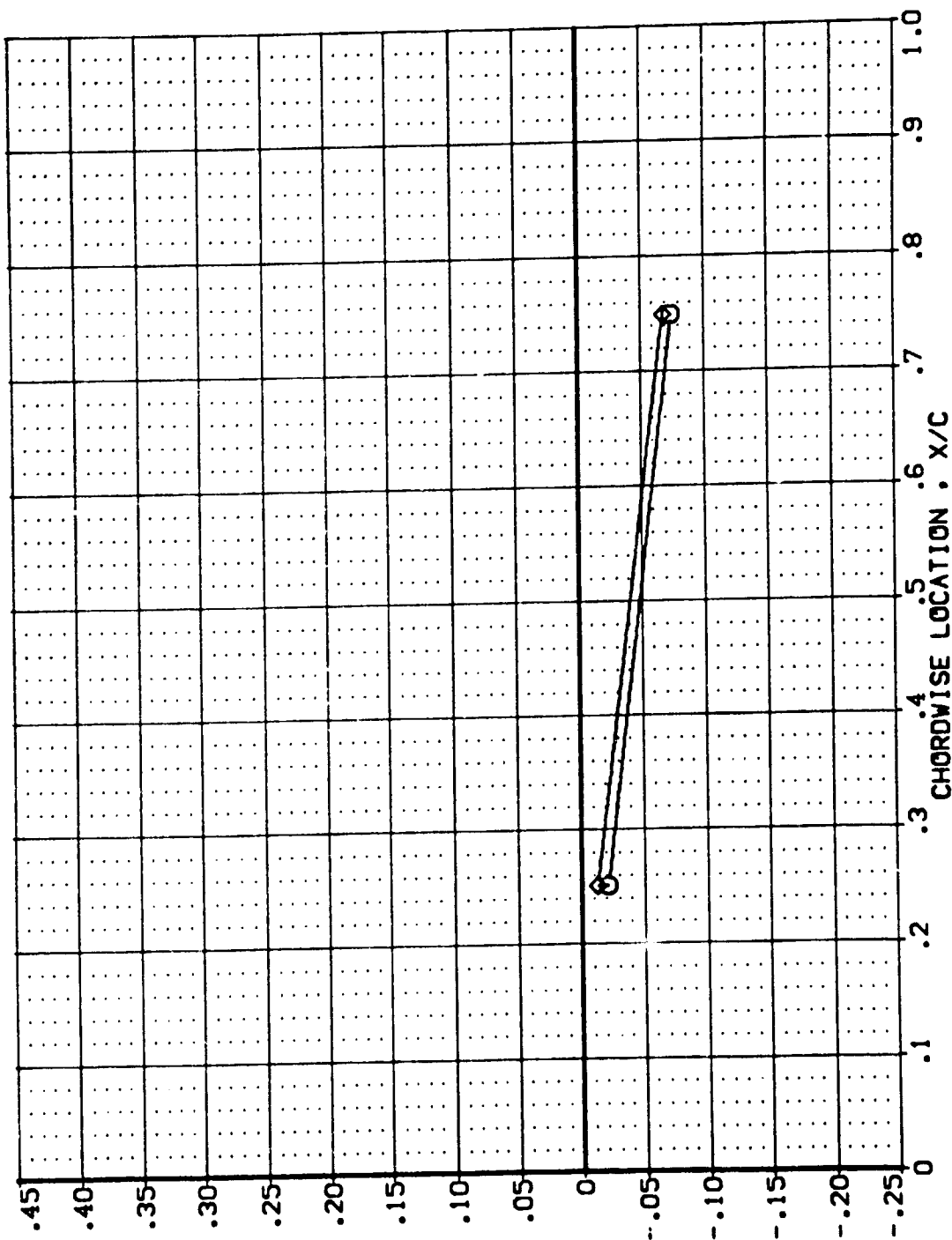
POWER .000
POWER .000
POWER .000

OPR

SPR

GIMBAL
1.000
1.000
3.000

PRESSURE COEFFICIENT, CP



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

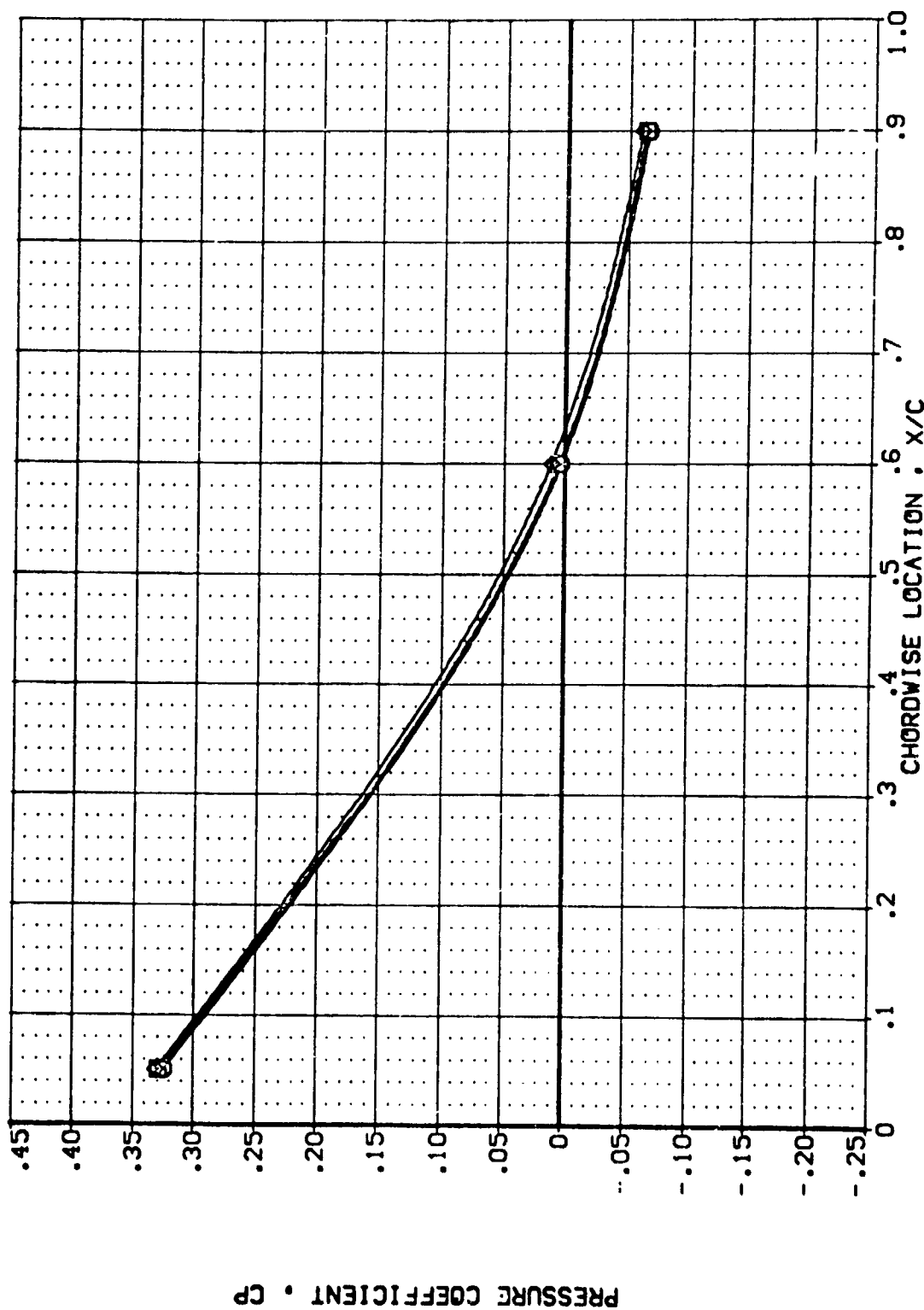
MACH = 3.500 ALPHA = .000 Y/B = .780

DATA SET SYMBOL
(UBZ106)
(UBZ046)
(UBZ088)

CONFIGURATION DESCRIPTION
AVES 87-710 IAI2C 01 TI SI
AVES 87-710 IAI2C 01 TI SI
AVES 87-710 IAI2C 01 TI SI

POWER CPR
.000
.000
.000

GIMBAL
4.000
1.000
3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

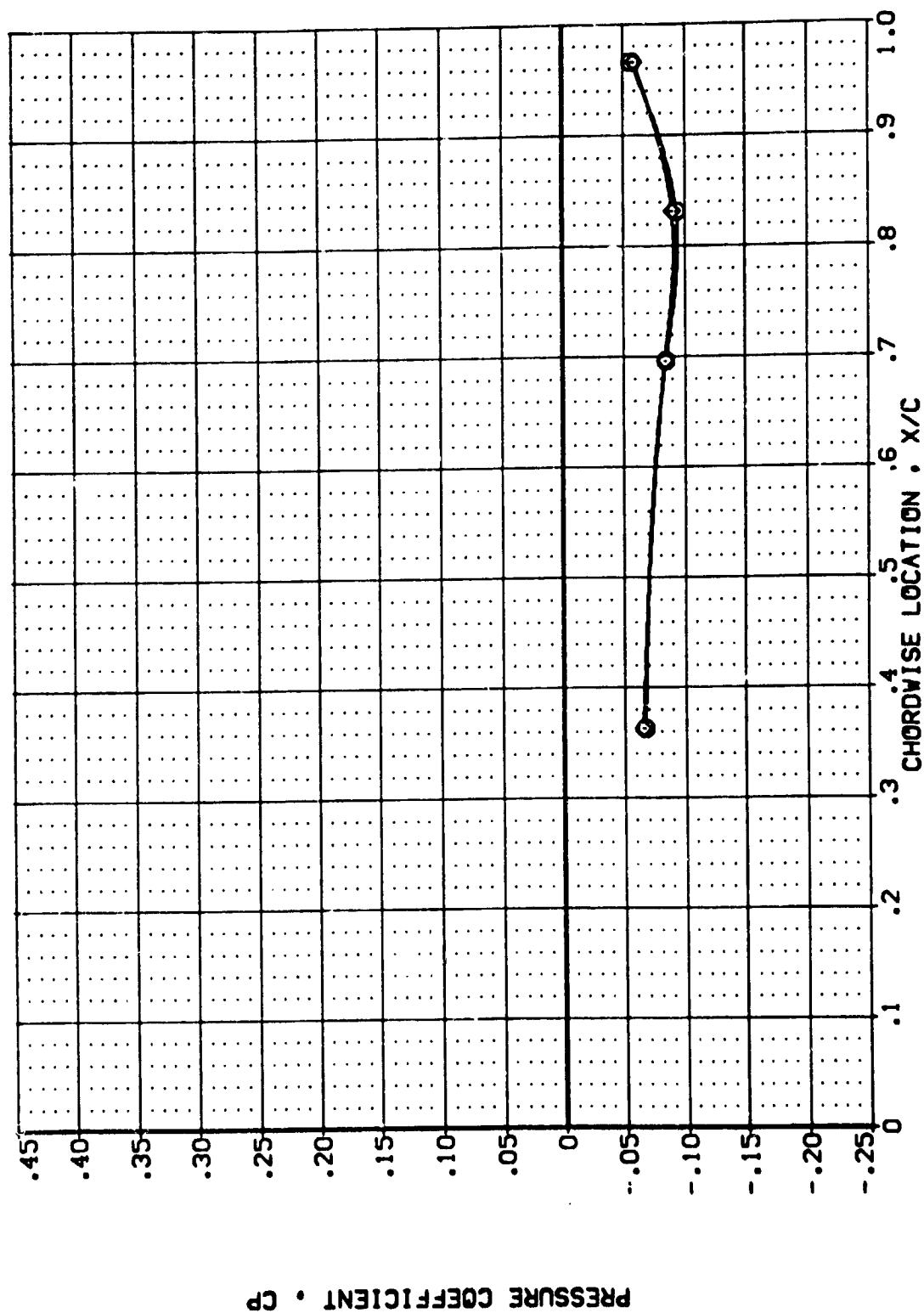
MACH = 3.500 ALPHA = .000 Y/E = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SPPR GIMBAL

(UBZ106) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 .000 4.000

(UBZD46) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 .000 1.000

(UBZD89) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 .000 3.000

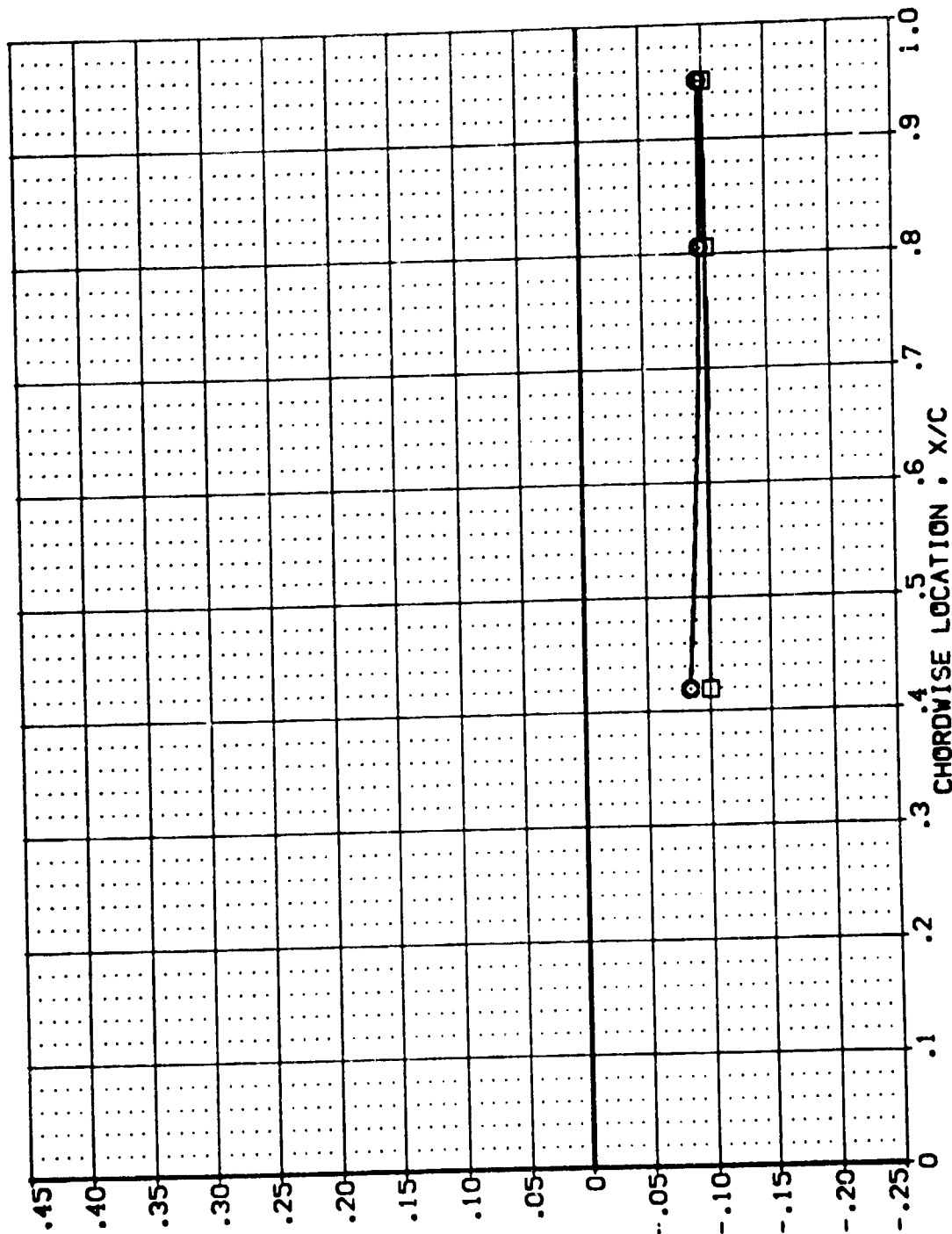


POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZ105) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ046) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ088) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

POWER C/P 0.000
 GIMBAL 4.000
 1.000
 3.000



PRESSURE COEFFICIENT • CP

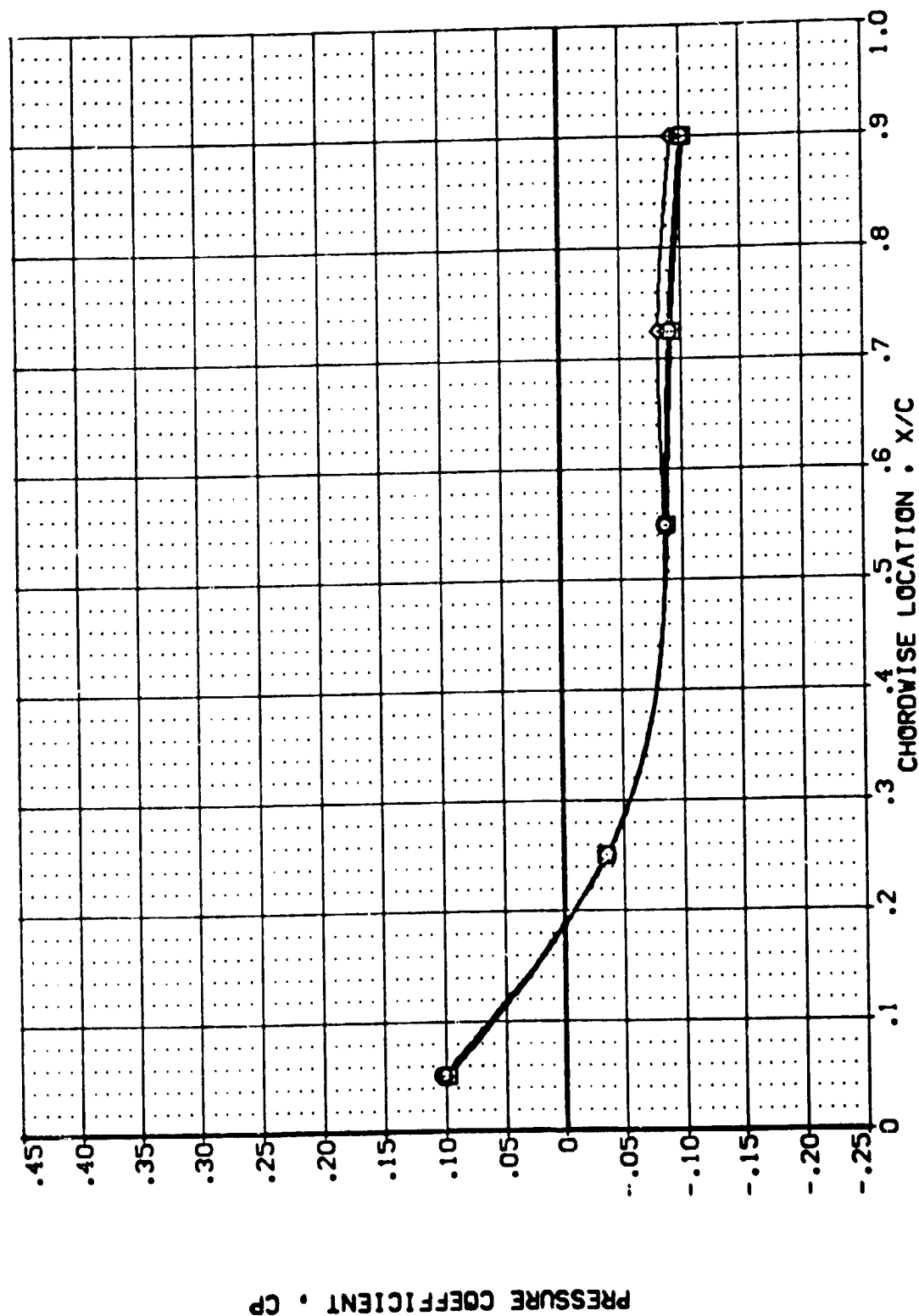
POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP
 MACH = 3.500 ALPHA = 8.000 Y/B = .427
 PAGE 446

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SPPR GIMBAL

(UBZ106) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 4.000

(UBZ046) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 1.000

(UBZ089) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

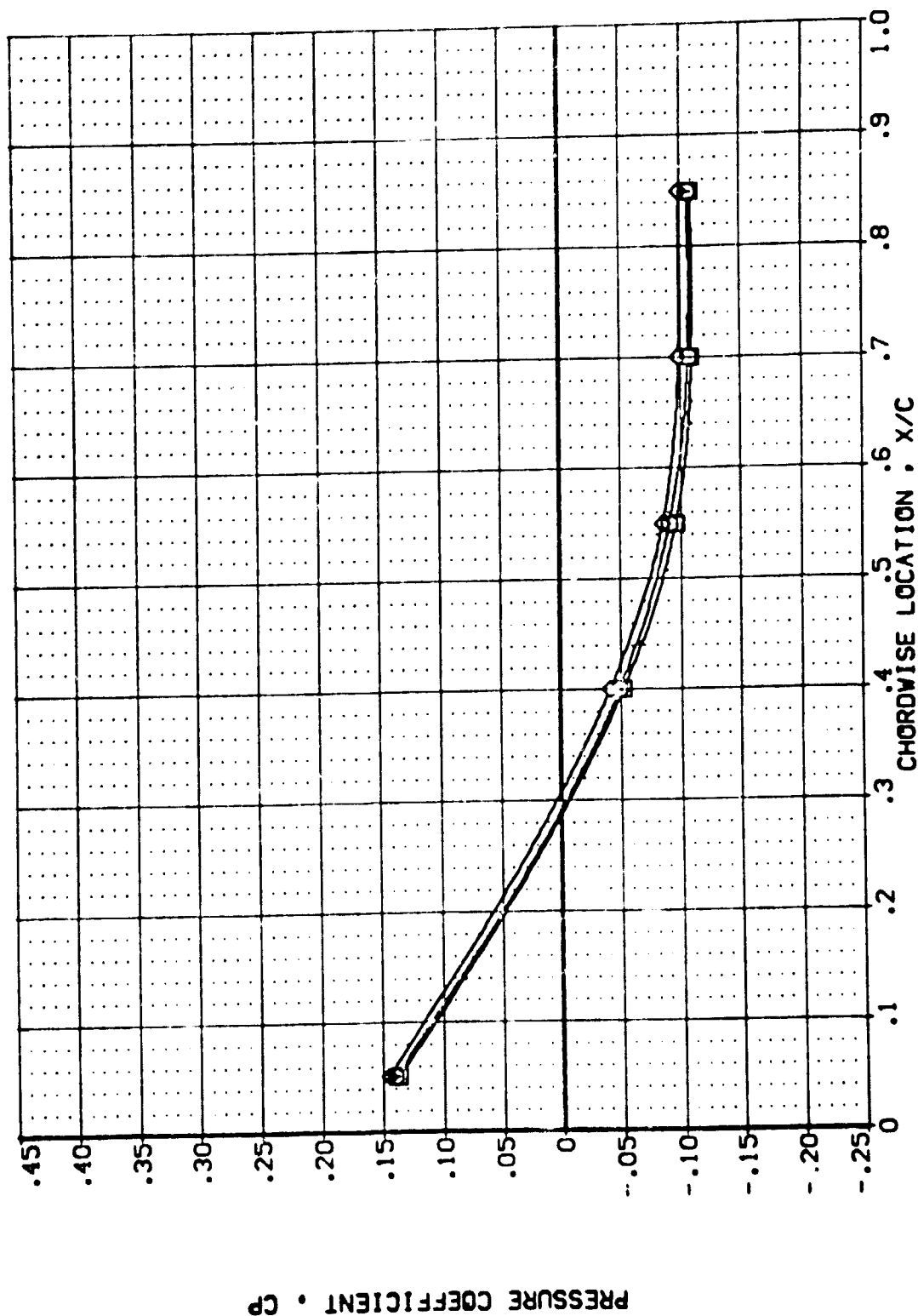
MACH = 3.500 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER UFR SFRP GIMBAL

(UBZ105) AYES 87-710 IAI2C 01 T1 S1 .000 .000 4.000

(UBZ045) AYES 87-710 IAI2C 01 T1 S1 .000 .000 1.000

(UBZ069) AYES 87-710 IAI2C 01 T1 S1 .000 .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

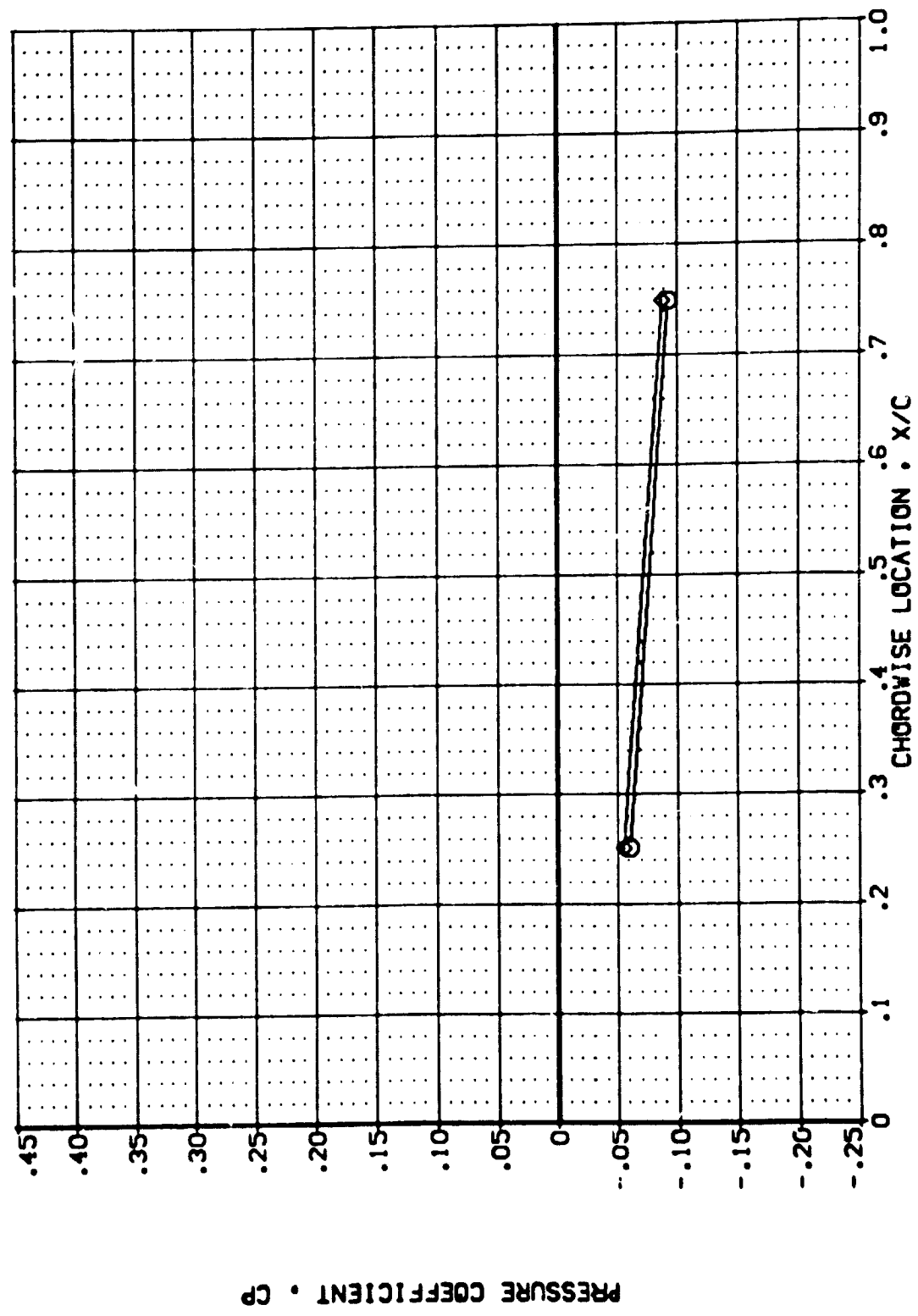
MACH = 3.500 ALPHA = 8.000 Y/B = .673 PAGE 448

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SNRPR GIMBAL

(UBZ105) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 .000 4.000

(UBZ045) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 .000 1.000

(UBZ085) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .780 PAGE 449

DATA 12 5700
(UPRLOS)
(UPRTOAE)
(UPRTOGS)

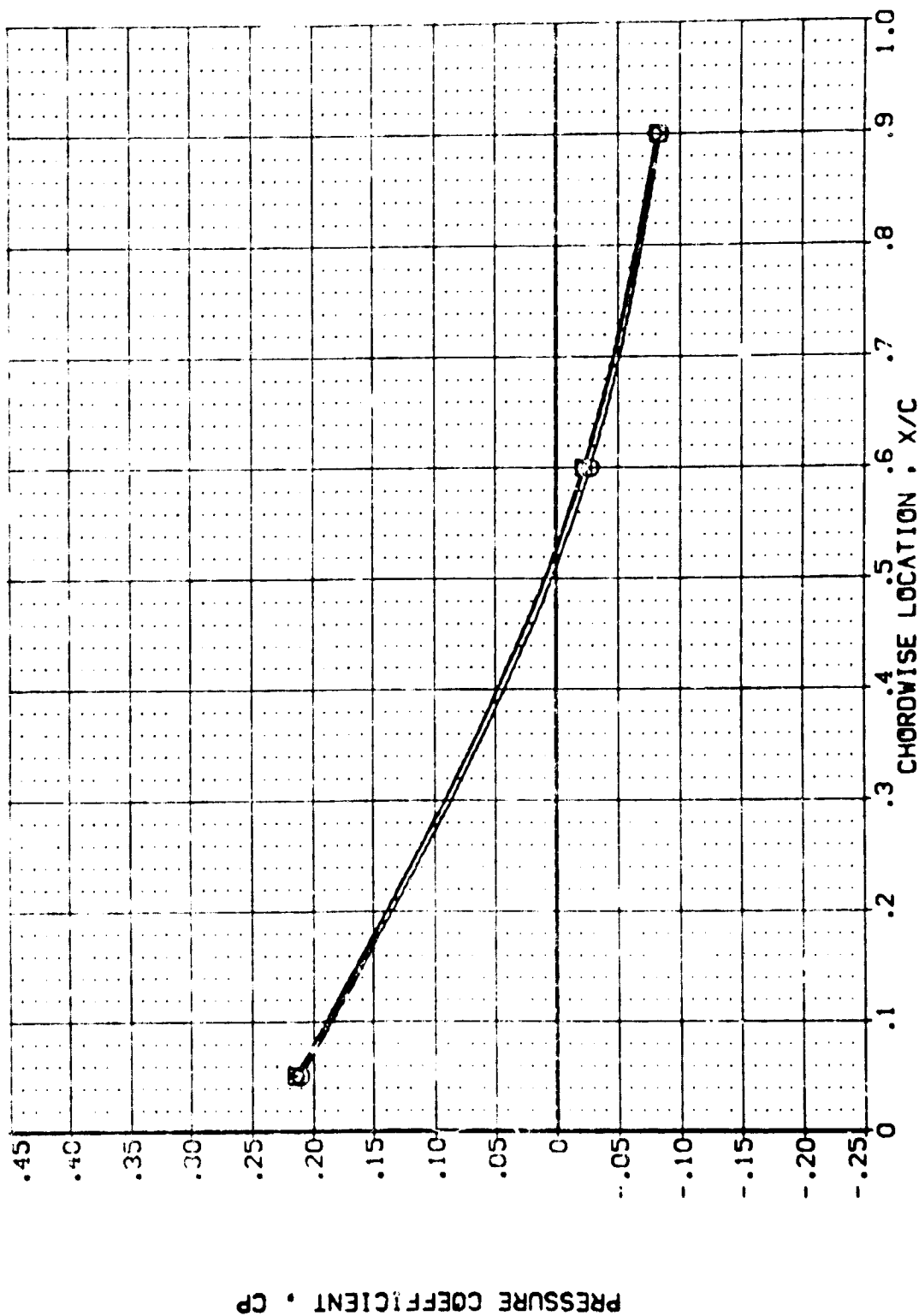
COPIES DESTROYED - 1967

YES 87-710	1A12C	11	SI
YES 87-710	1A12C	01	TI
YES 87-710	1A12C	01	TI

LOWER VING PRESSURE
UPPER VING PRESSURE

5888

61124
4.000
1.000
3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

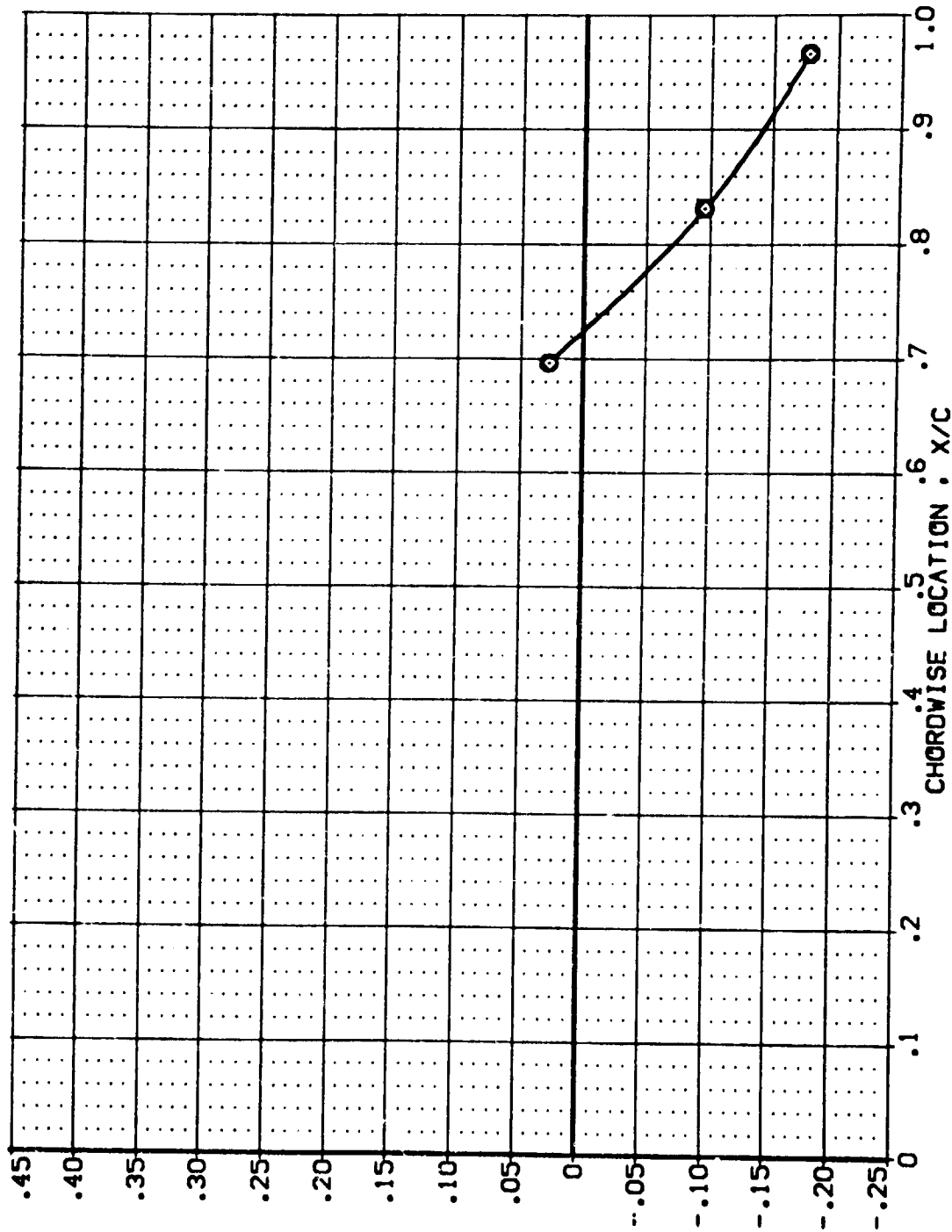
MACH =	3.500	ALPHA =	8.000	Y/B =	.887	PAGE	450
--------	-------	---------	-------	-------	------	------	-----

DATA SET SYMBOL
(LB2097)
(LB2097)
(LB2097)

CONFIGURATION DESCRIPTION

AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER GPR SGRPR GIMBAL
.000
.000
1.000
3.000



PRESSURE COEFFICIENT • CP

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL
(LBZ097)
(LBZ097)
(LBZ097)

CONFIGURATION DESCRIPTION
AES 87-710 IAI2C 01 T1 S1
AES 87-710 IAI2C 01 T1 S1
AES 87-710 IAI2C 01 T1 S1

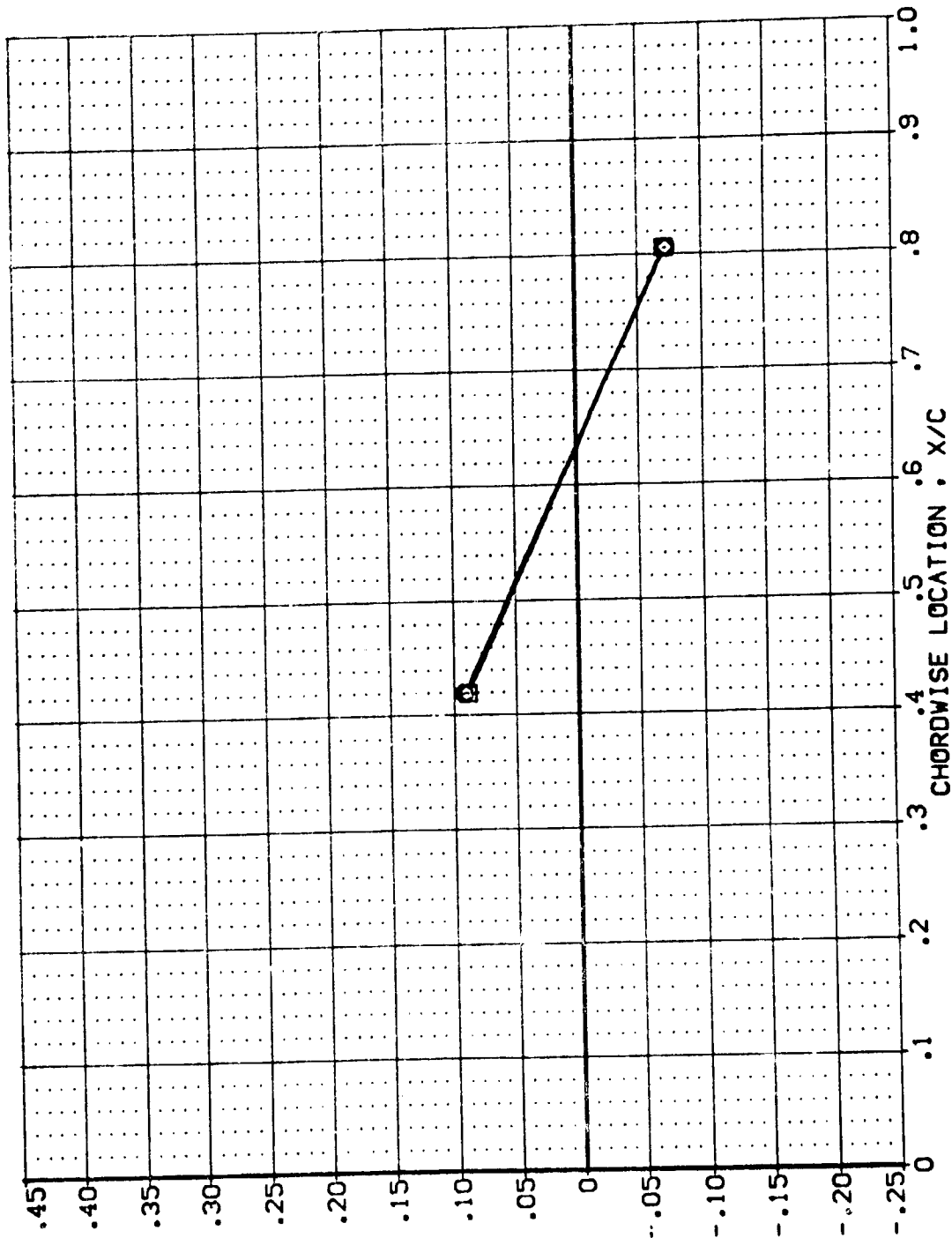
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER .000
POWER .000
POWER .000

G-PR .000
G-PR .000
G-PR .000

GIMBAL 1.000
GIMBAL 1.000
GIMBAL 3.000

PRESSURE COEFFICIENT - CP



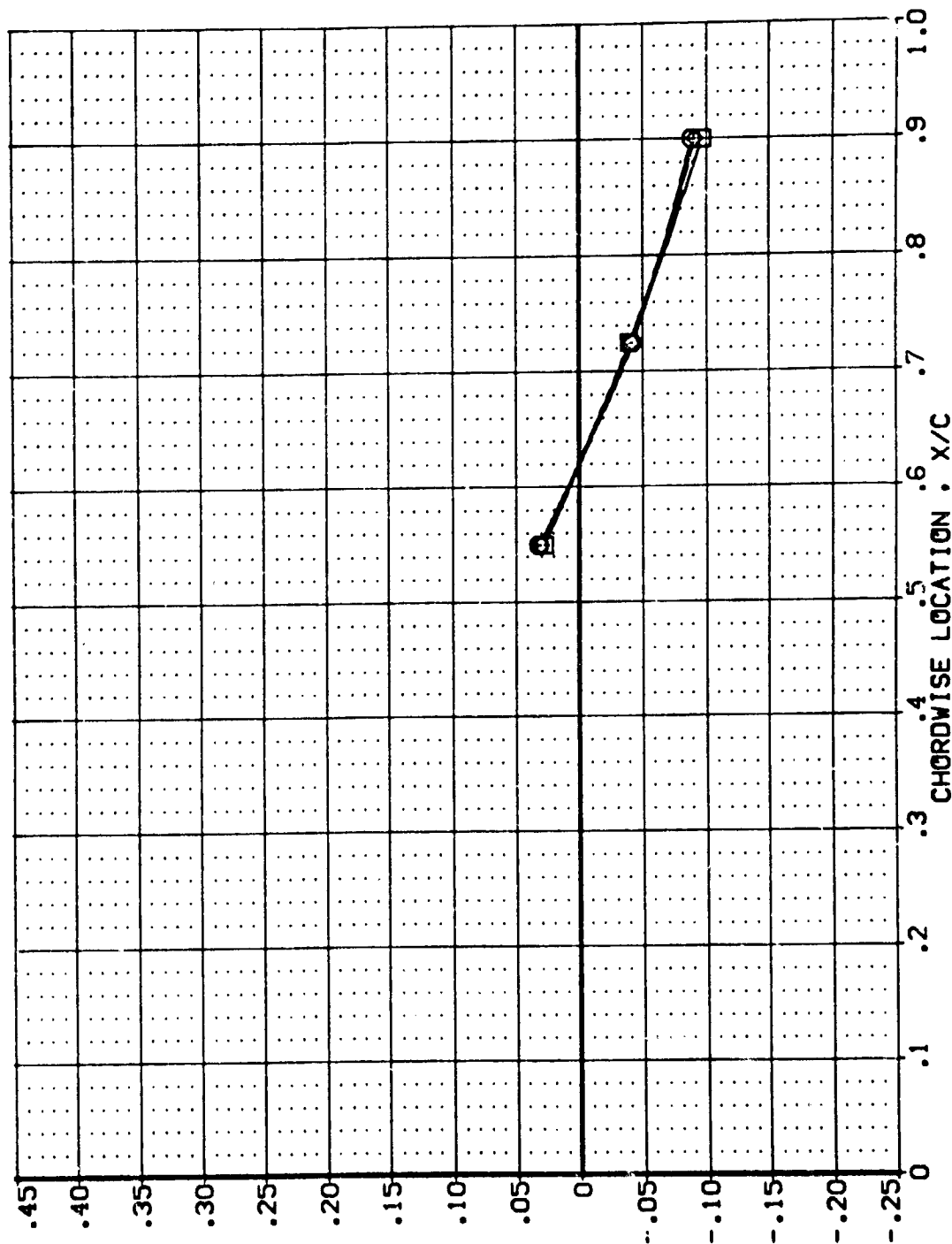
POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .427

PAGE 452

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZ057) AYES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE
 (LBZ037) AYES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE
 (LBZ093) AYES 87-710 IAI2C 01 TI SI LOWER WING PRESSURE

POWER GPR SRRPR GIMBAL
 .000 .000 4.000
 .000 .000 1.000
 .000 .000 3.000



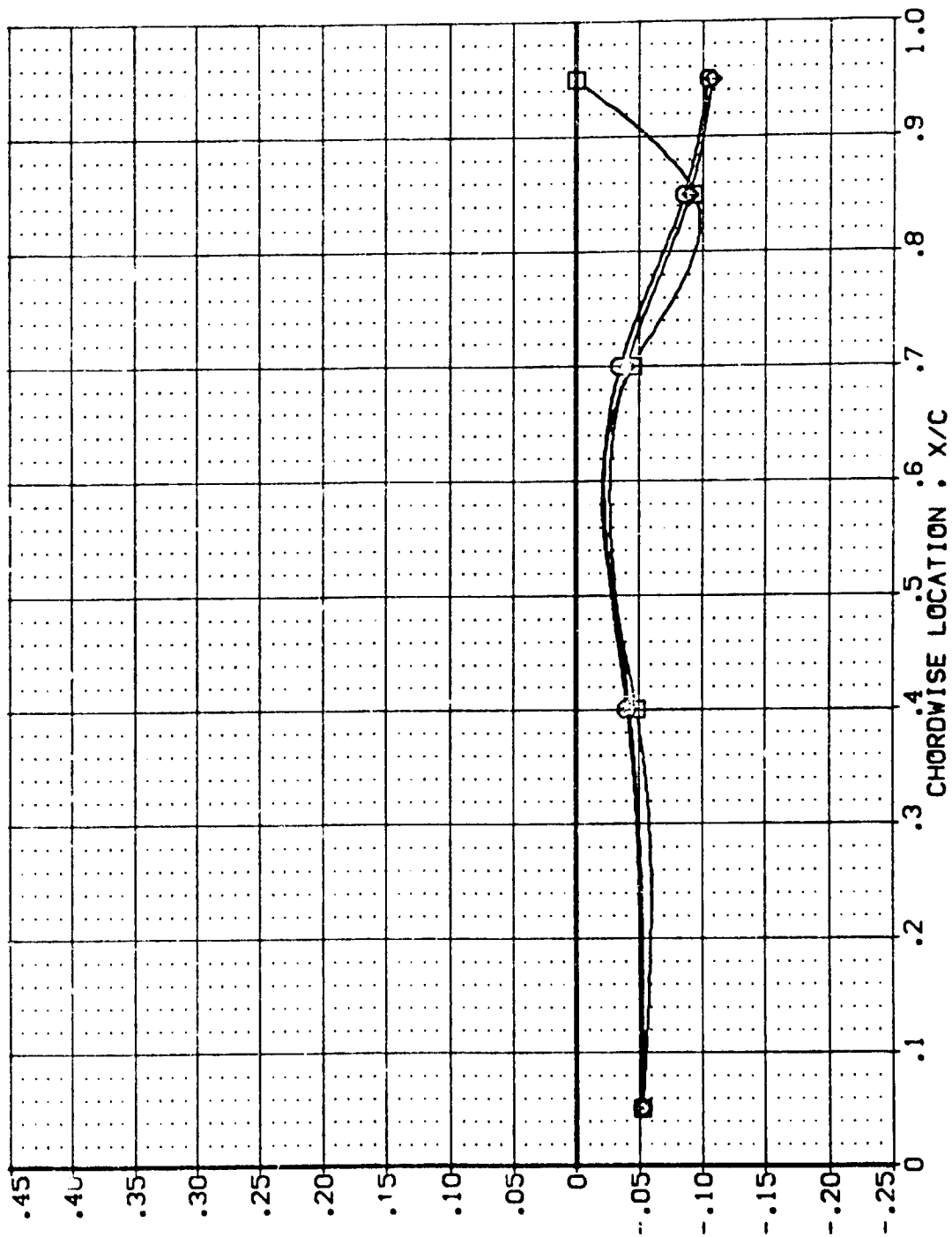
POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ097) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ097) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ093) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER 3/R 50NPR GIMBAL
 .000 4.000
 .000 1.000
 .000 3.000



PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

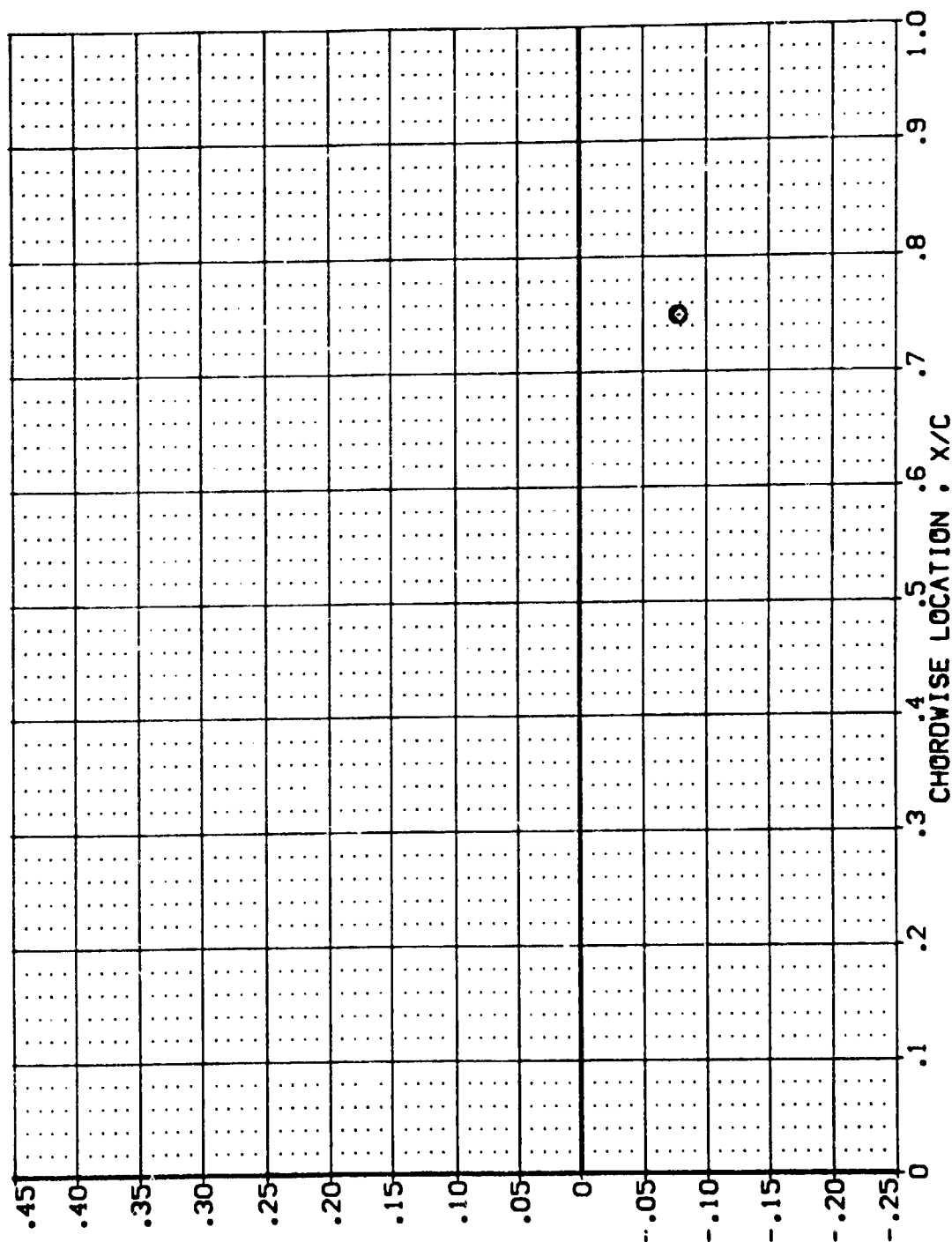
MACH = 2.500 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ037)
(LBZ037)
(LBZ037)

AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE

POWER GPR SWPR GIMBAL
.000
.000
4.000
1.000
3.000



PRESSURE COEFFICIENT • CP

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .780

POWER GIMBAL
4.000
1.000
3.000

POWER OFR

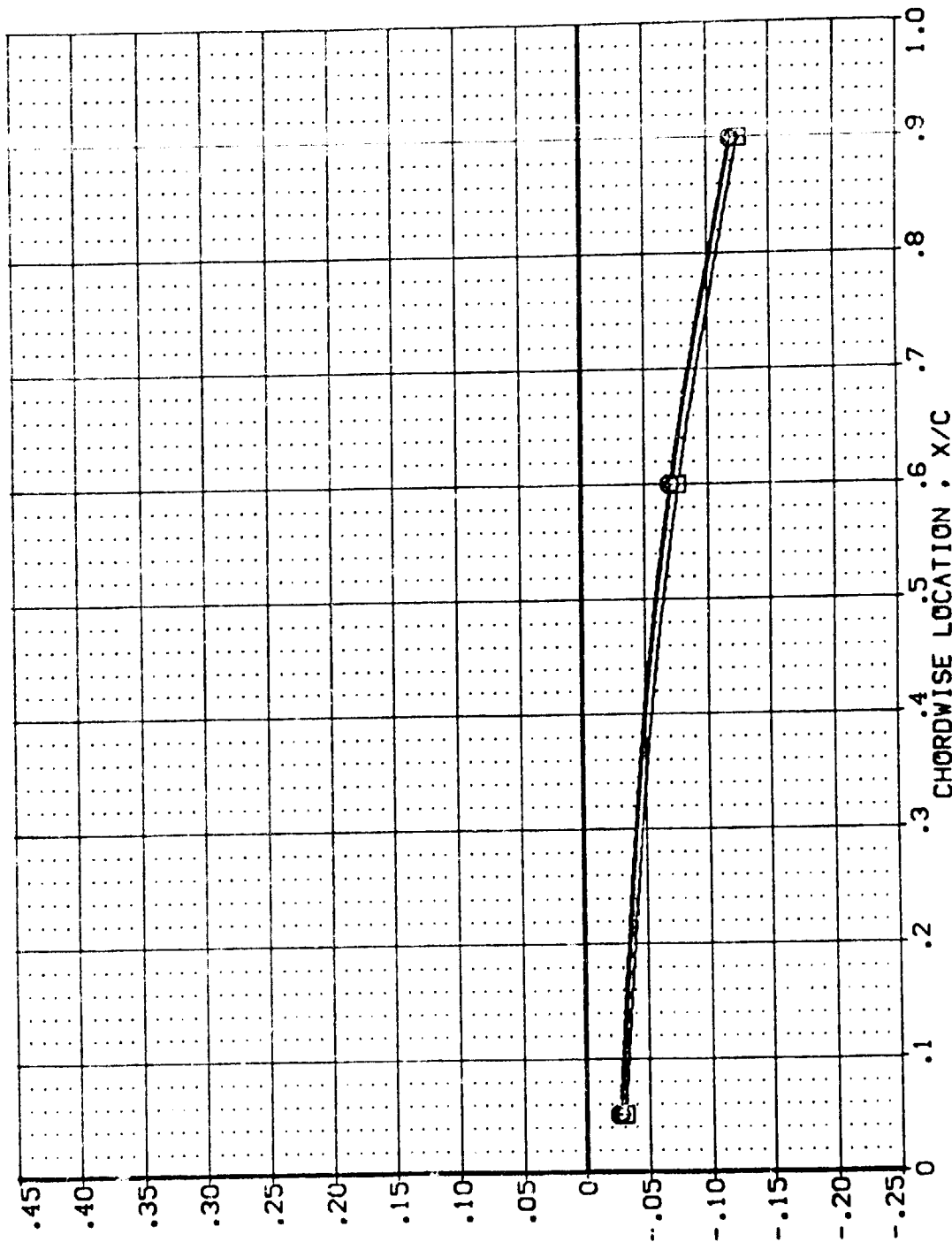
POWER OFR
.000
.000
.000

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

CONFIGURATION DESCRIPTION
AVES 87-710 1A12C 01 T1 S
AVES 87-710 1A12C 01 T1 S
AVES 87-710 1A12C 01 T1 S

DATA SET SYMBOL
(LB20597)
(LB2037)
(LB2083)

PRESSURE COEFFICIENT • CP



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 2.500 ALPHA = -8.000 Y/B = .887

PAGE 456

DATA SET SYMBOL

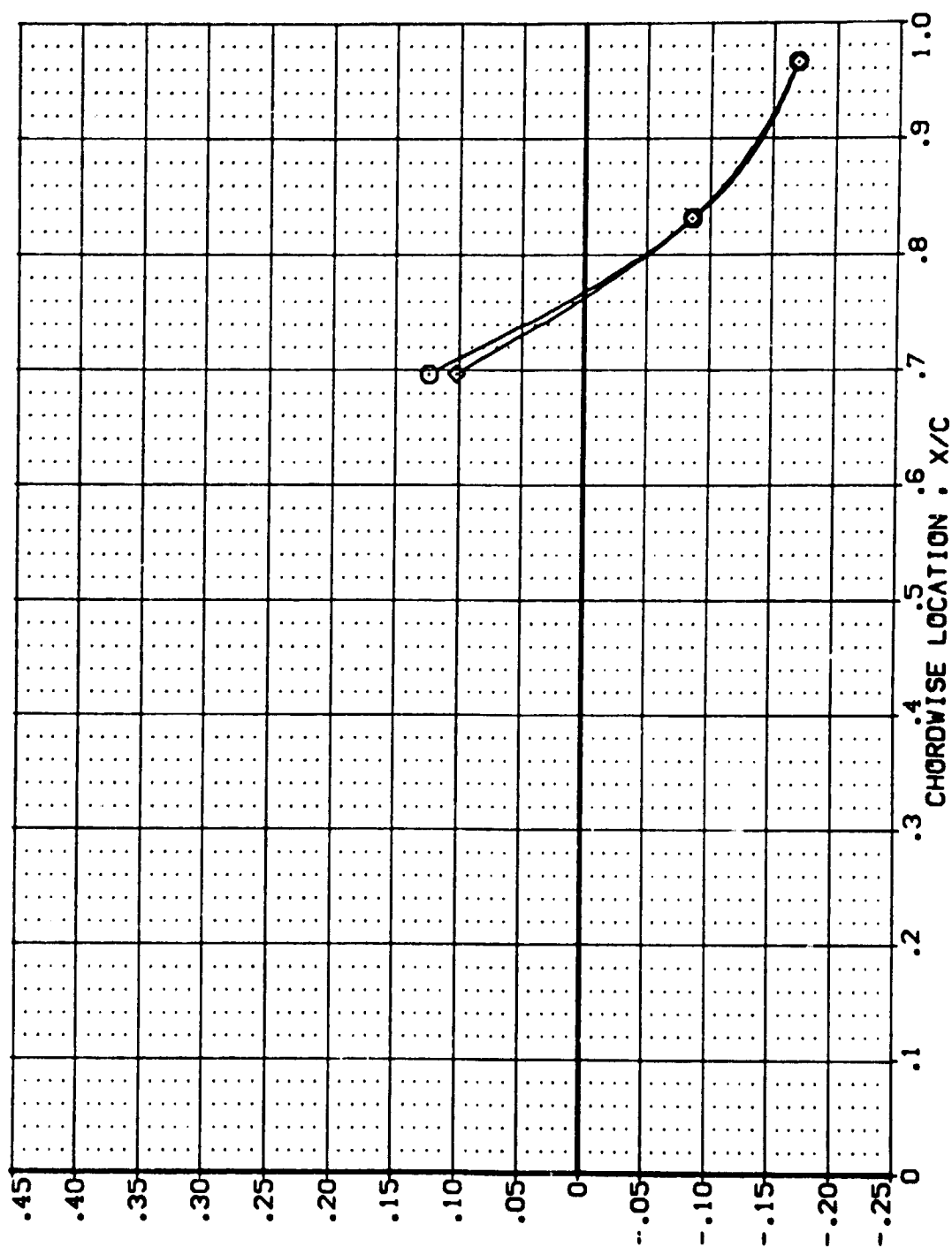
(LBZ057)
(LBZ057)
(LBZ057)

CONFIGURATION DESCRIPTION
AHES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AHES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AHES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE

POWER C/P
.000
.000
.000

GIMBAL
4.000
1.000
3.000

PRESSURE COEFFICIENT • CP



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB2097)
(LB2097)
(LB2093)

AVES 87-710
AVES 87-710
AVES 87-710

IA12C 61 TI SI
IA12C 61 TI SI
IA12C 61 TI SI

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER

.000
.000
.000

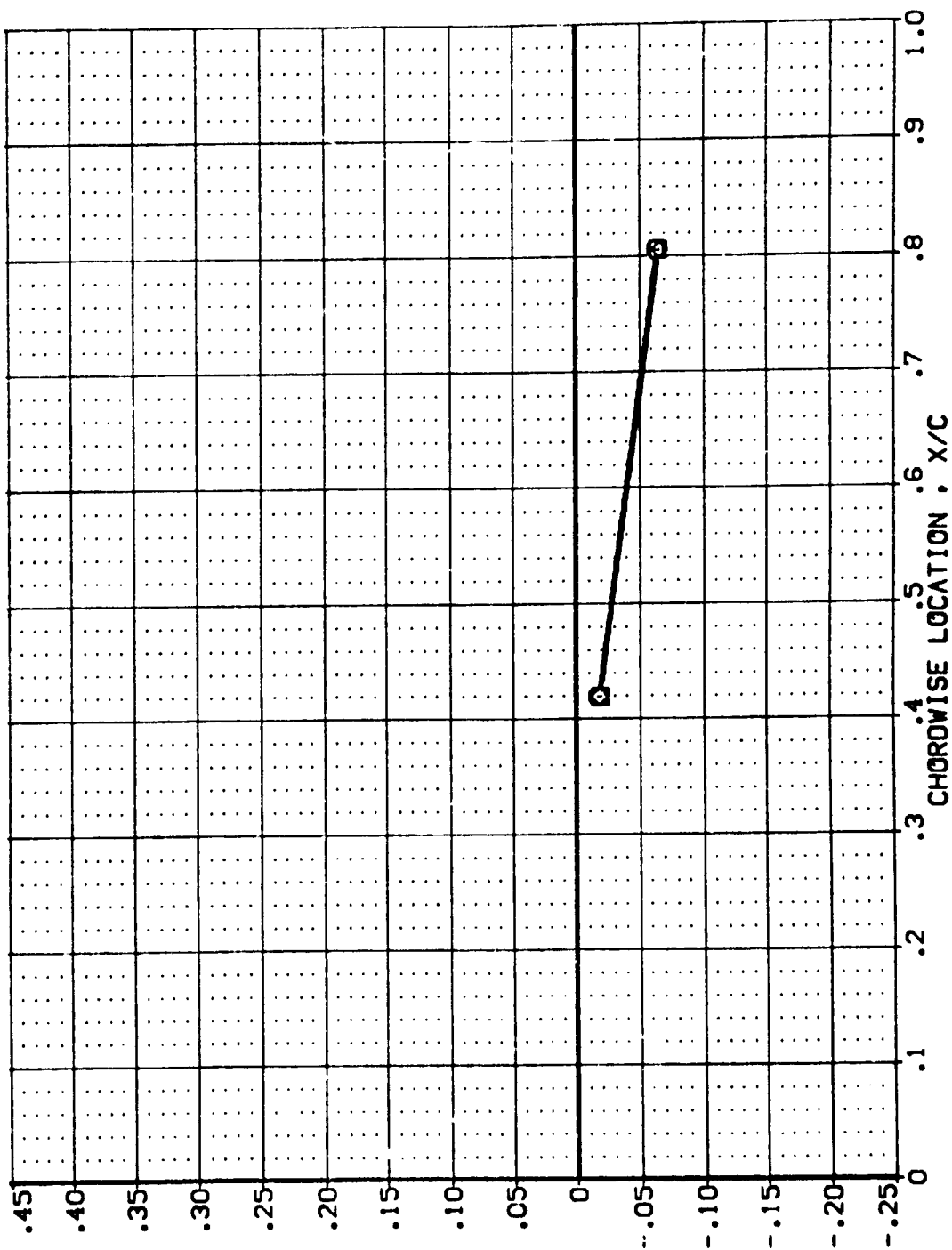
CPR

SPR

GIMBAL

4.000
1.000
3.000

PRESSURE COEFFICIENT, CP



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

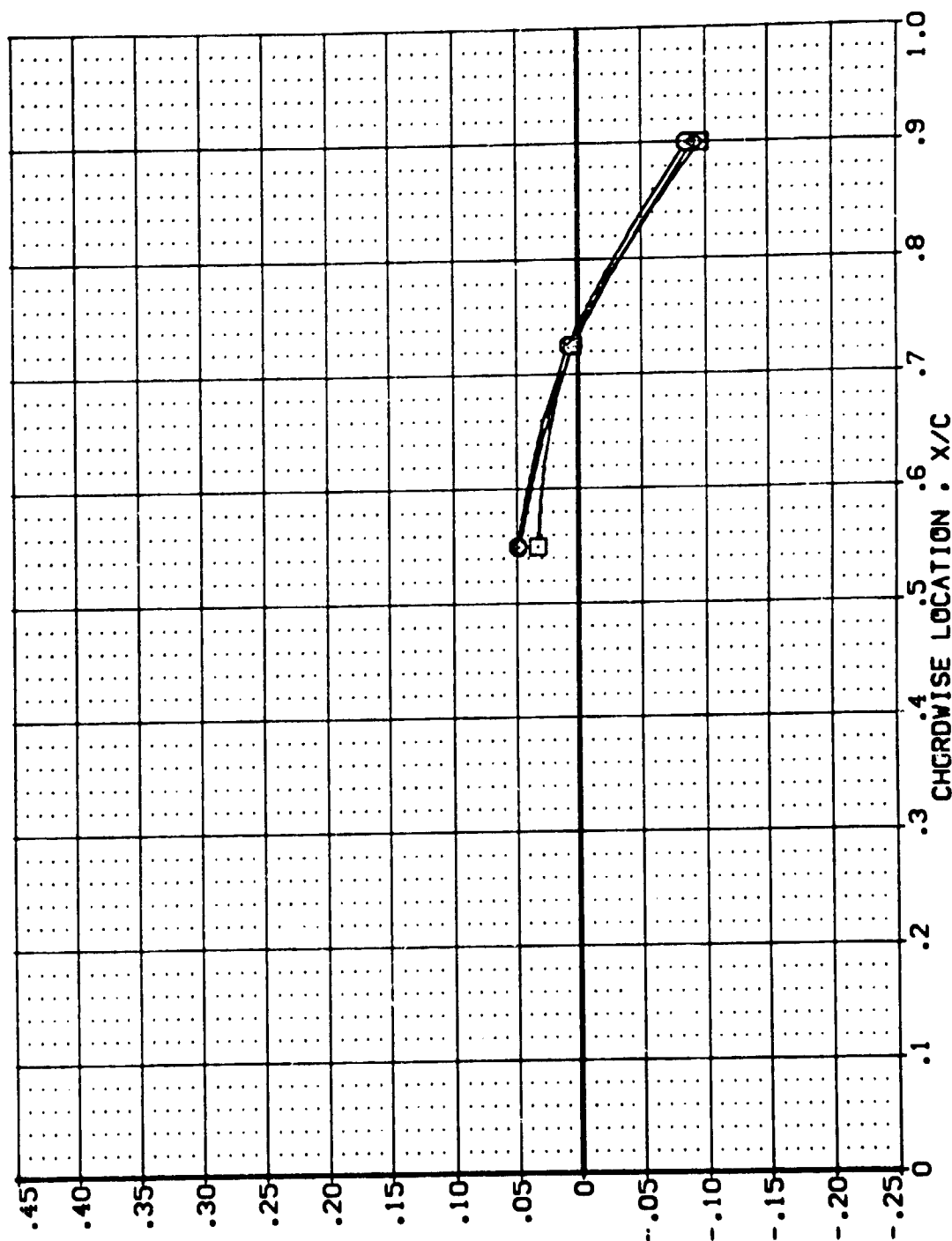
MACH = 2.500 ALPHA = .000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SPPR GIMBAL

(LBZ097) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 .000 4.000

(LBZ037) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 .000 1.000

(LBZ093) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 .000 3.000



PRESSURE COEFFICIENT • CP

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

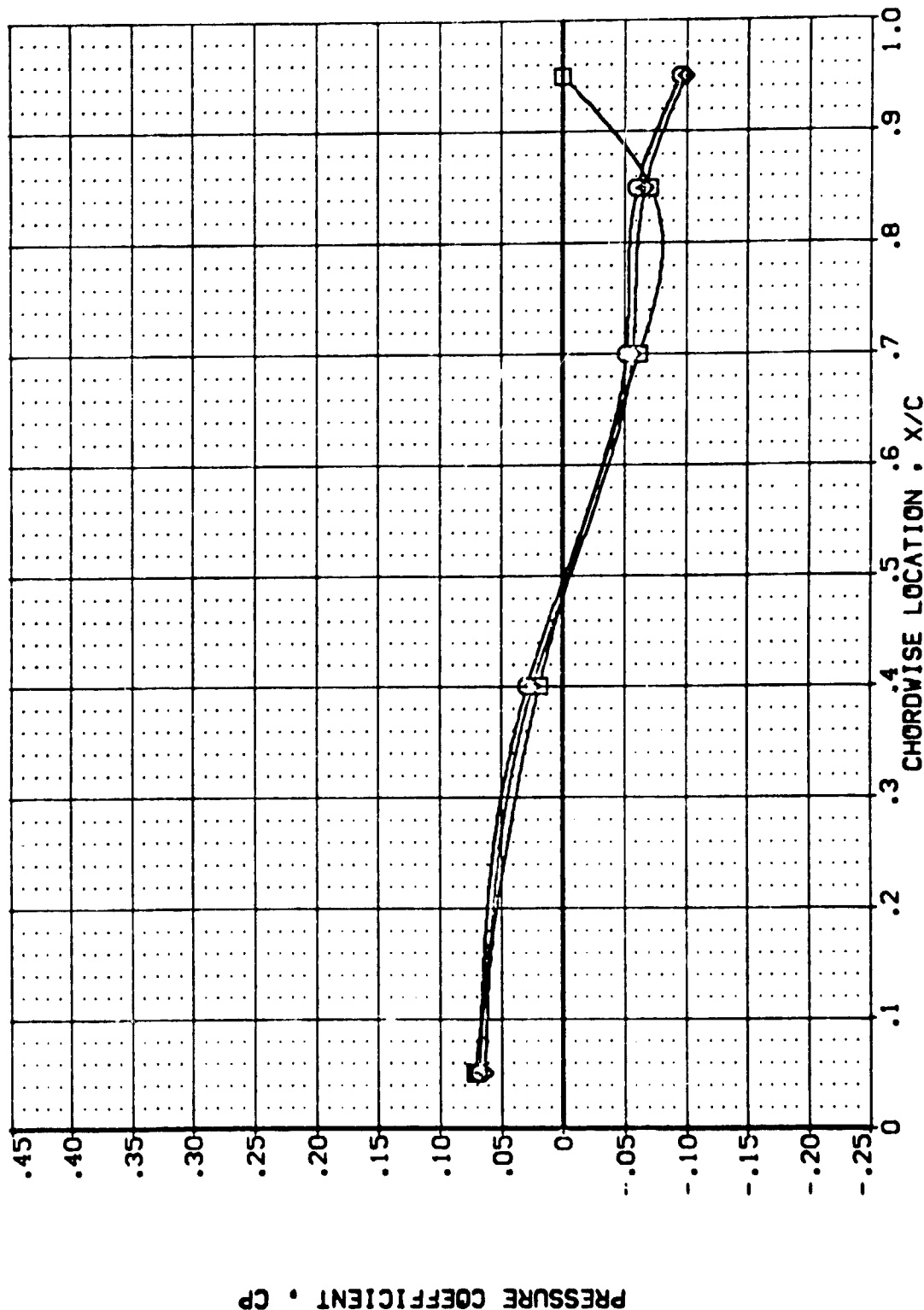
MACH = 2.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SRRR GIMBAL

(LB0097) ARES 87-710 IA12C 01 T1 S1 LOWER WING PRESSURE .000 .000 4.000

(LB0037) ARES 87-710 IA12C 01 T1 S1 LOWER WING PRESSURE .000 .000 1.000

(LB0063) ARES 87-710 IA12C 01 T1 S1 LOWER WING PRESSURE .000 .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

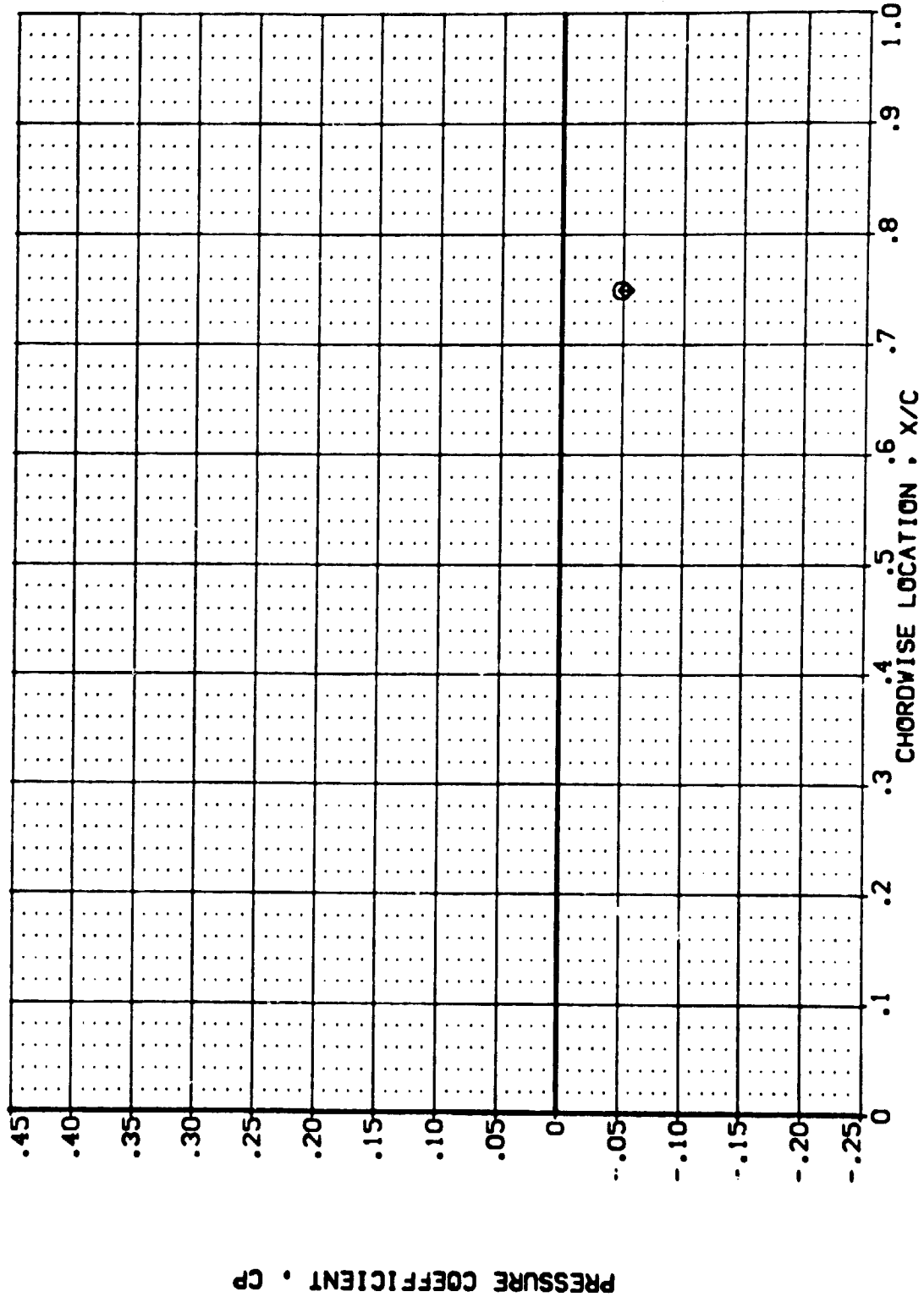
MACH = 2.500 ALPHA = .000 Y/B = .673 PAGE 460

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SAPP GIMBAL

(LB2057) AYES 87-710 IAI2C OI TI SI LOWER WING PRESSURE .000 .000 4.000

(LB2037) AYES 87-710 IAI2C OI TI SI LOWER WING PRESSURE .000 .000 1.000

(LB2053) AYES 87-710 IAI2C OI TI SI LOWER WING PRESSURE .000 .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 2.500 ALPHA = .000 Y/B = .780 PAGE 461

DATA SET SYMBOL

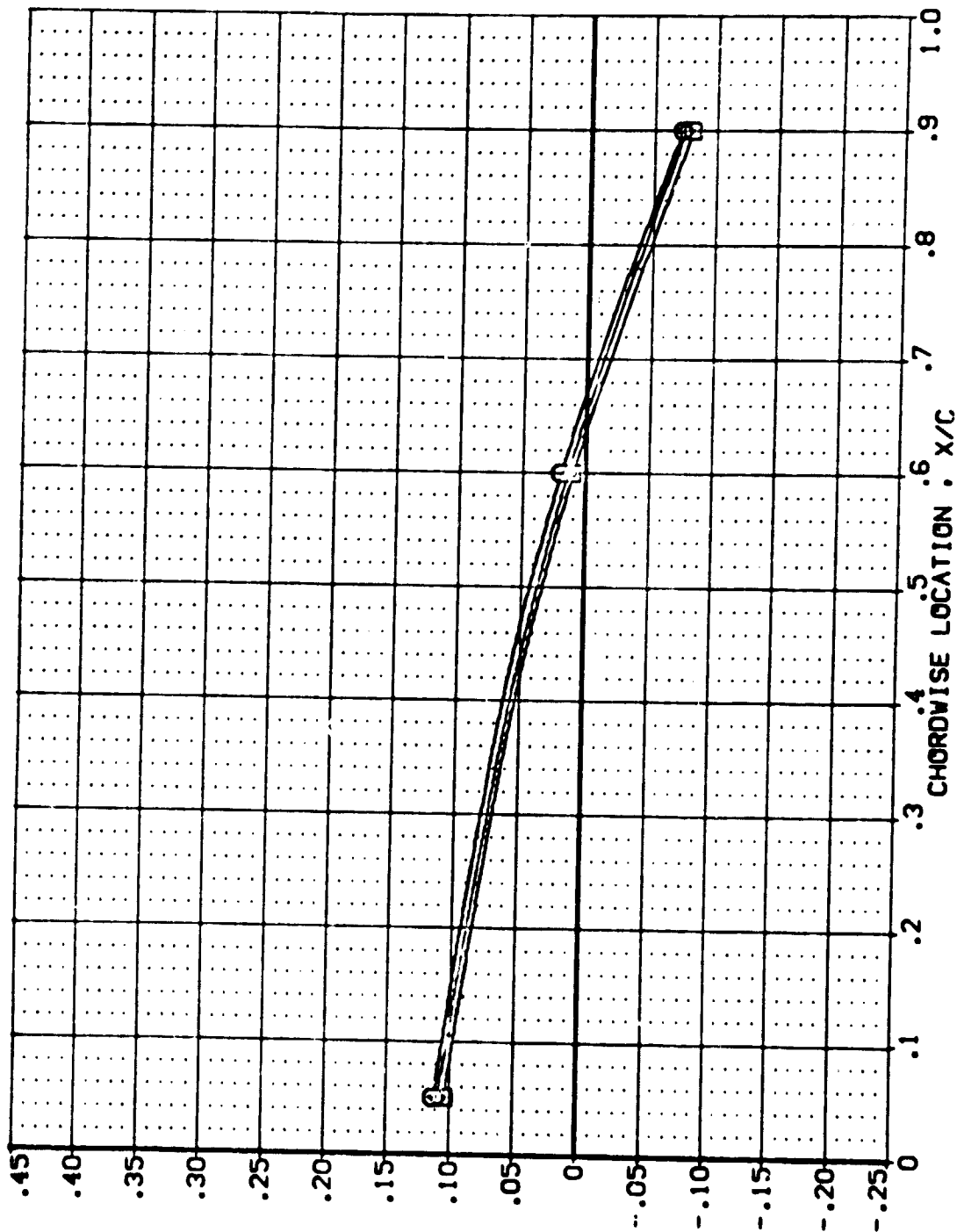
(LB0097)
(LB0097)
(LB0097)

CONFIGURATION DESCRIPTION

AVES 87-710 IAI2C OI T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C OI T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C OI T1 S1 LOWER WING PRESSURE

POWER .000
OPR .000
GIMBAL 3.000

SNAPR 4.000
GIMBAL 1.000
GIMBAL 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM
MACH = 2.500 ALPHA = .000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

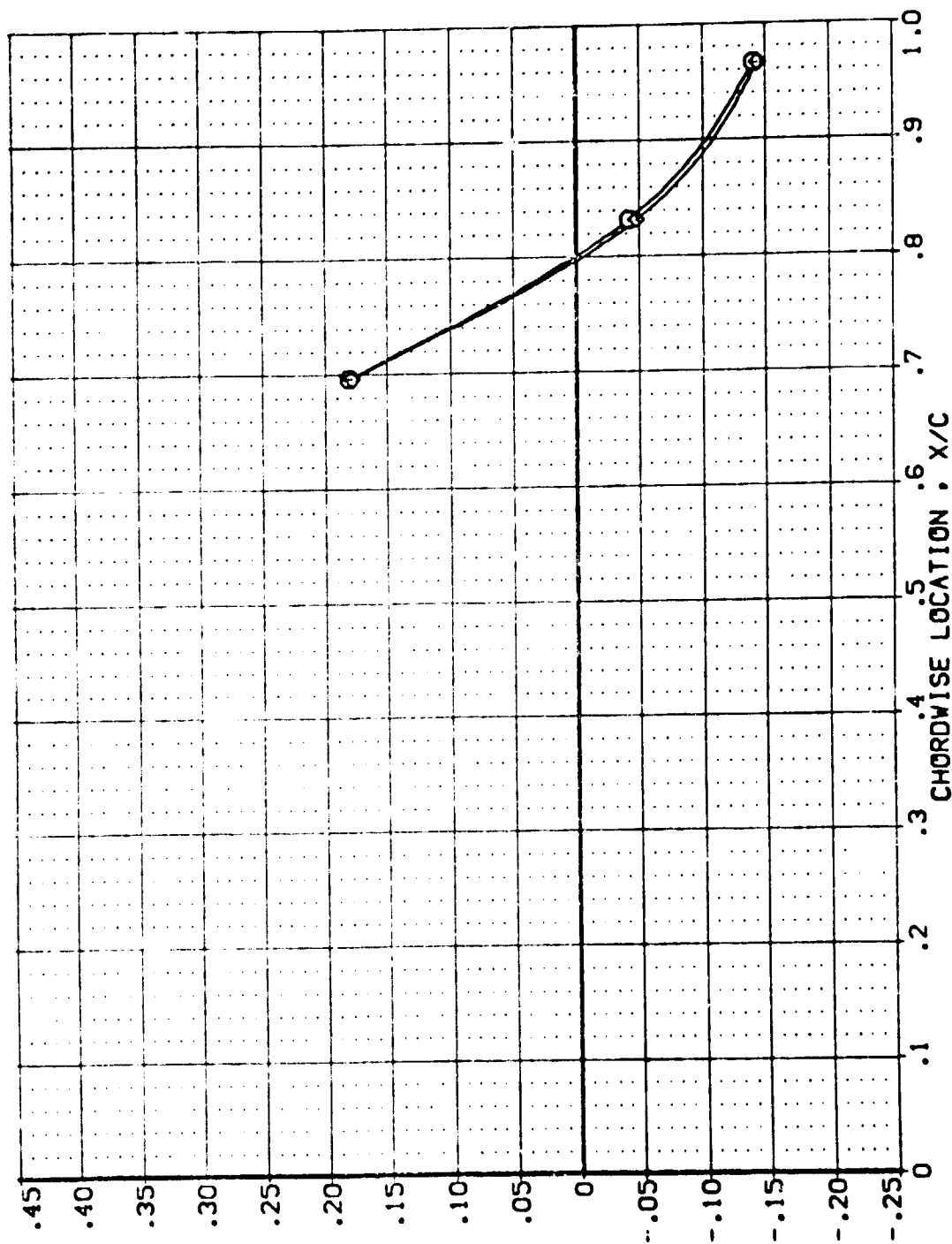
(L82087)
(L82087)
(L82088)

AVES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE

POWER 0.000
0.000
0.000

SWFR 4.000
1.000
3.000

GIMBAL



PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

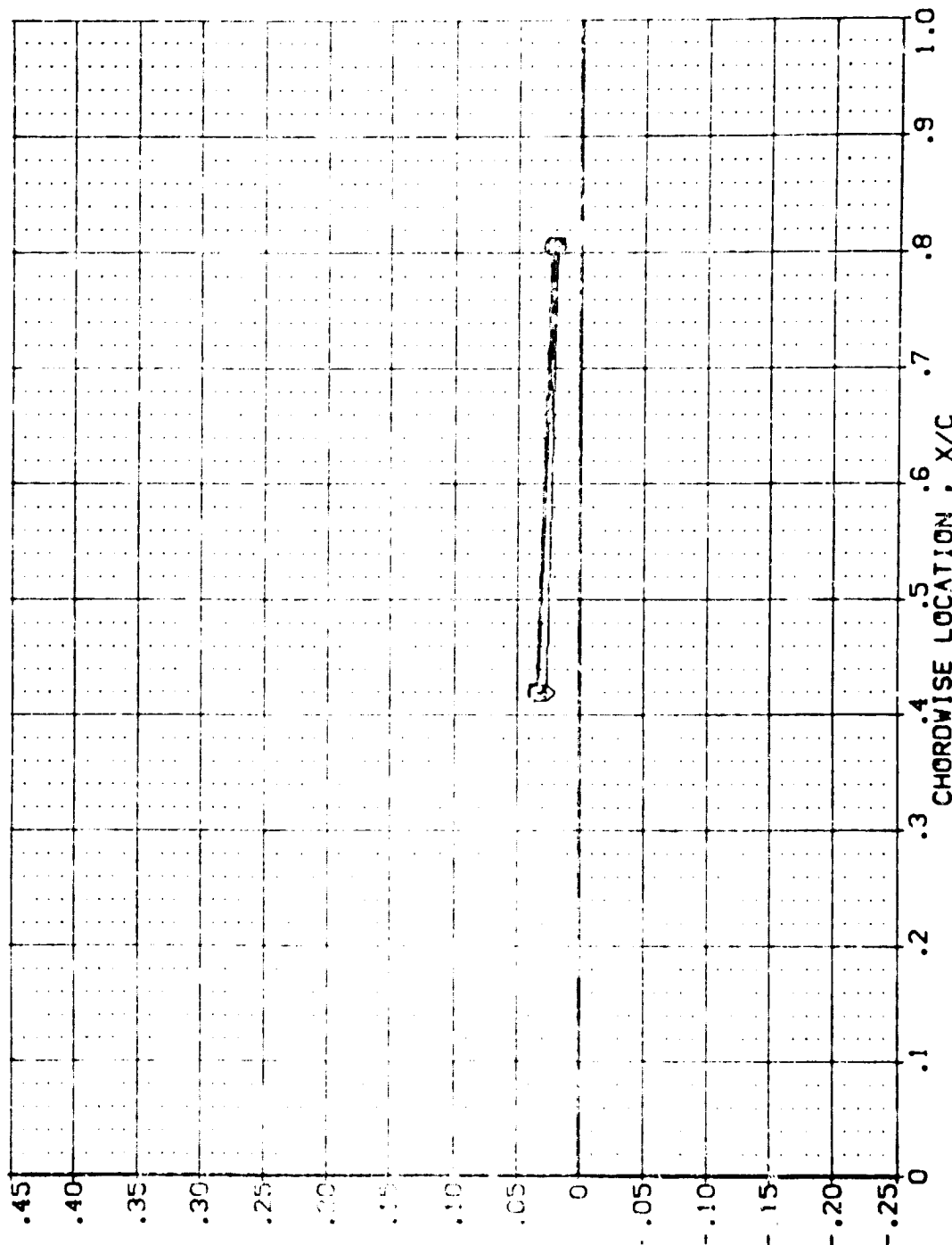
MACH = 2.500 ALPHA = 6.000 Y/B = .299

DATA SET SYMBOL

(LB2037)
(LB2037)
(LB2037)

CONFIGURATION DESCRIPTION
A-ES 87-710 [A] [Z] [C] [O] [I] [T] [S] LOWER WING PRESSURE
A-ES 87-710 [A] [Z] [C] [O] [I] [T] [S] LOWER WING PRESSURE
A-ES 87-710 [A] [Z] [C] [O] [I] [T] [S] LOWER WING PRESSURE

POWER CORR SUPER GIMBAL
.000
.000
4.000
1.000
3.000



PRESSURE COEFFICIENT - CP

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .427

PAGE 464

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB7057)
(LB7057)
(LB7057)

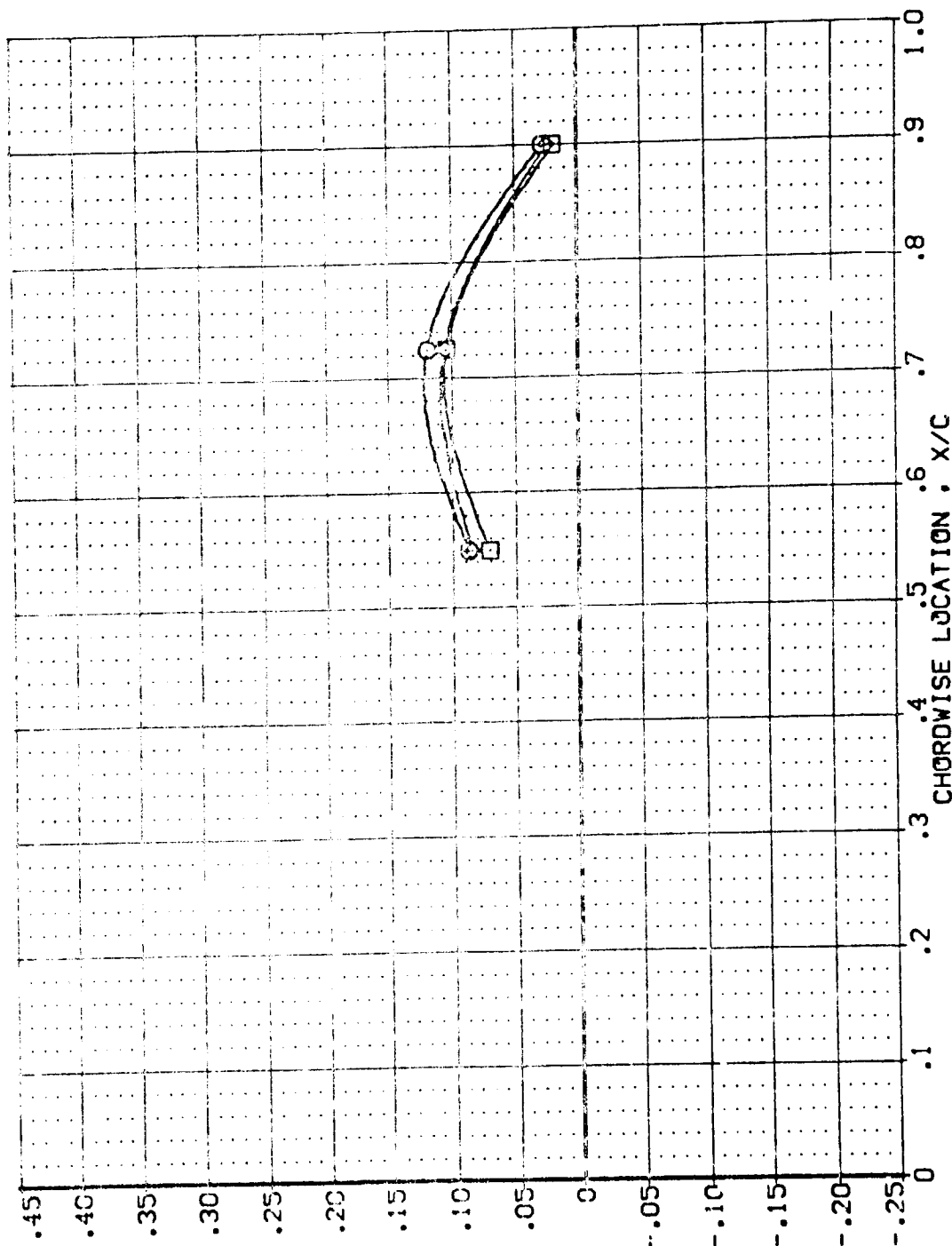
AVES 87-710
AVES 87-710
AVES 87-710

1A12C 01 11 01
1A12C 01 11 01
1A12C 01 11 01

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER GPR SWPR GIMBAL
.000
.000
1.000
3.000

PRESSURE COEFFICIENT - CP



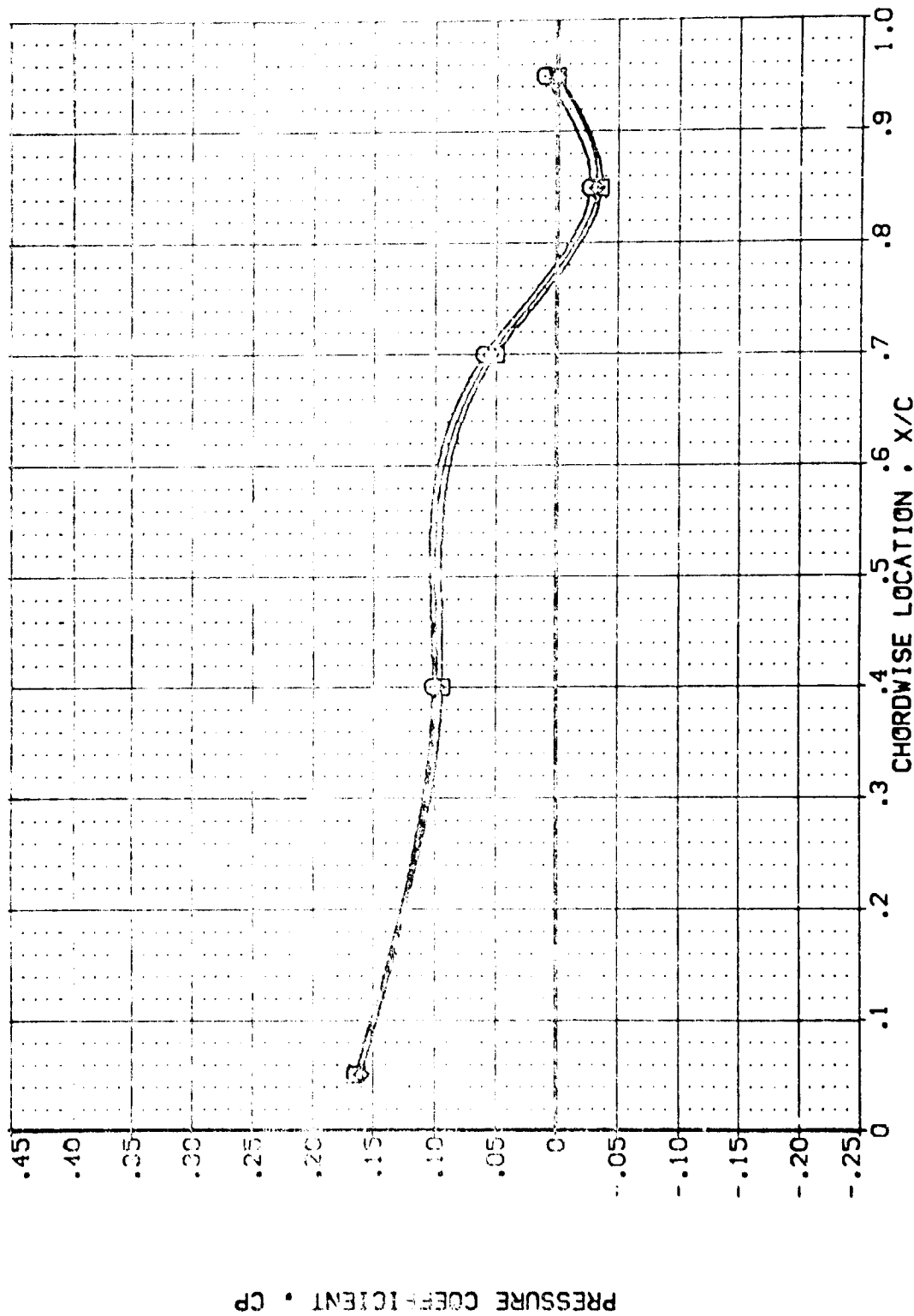
POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .534

DATA SET NAME
(LBZ037)
(LBZ037)
(LBZ037)

CONFIGURATION DESCRIPTION
AIES 37-710 1A12C 01 11 51 LOWER WING PRESSURE
AIES 87-710 1A12C 01 11 51 LOWER WING PRESSURE
AIES 87-710 1A12C 01 11 51 LOWER WING PRESSURE

POWER QFR QFR QFR
4.000
1.000
3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM
MACH = 2.500 ALPHA = 6.000 Y/B = .673
PAGE 466

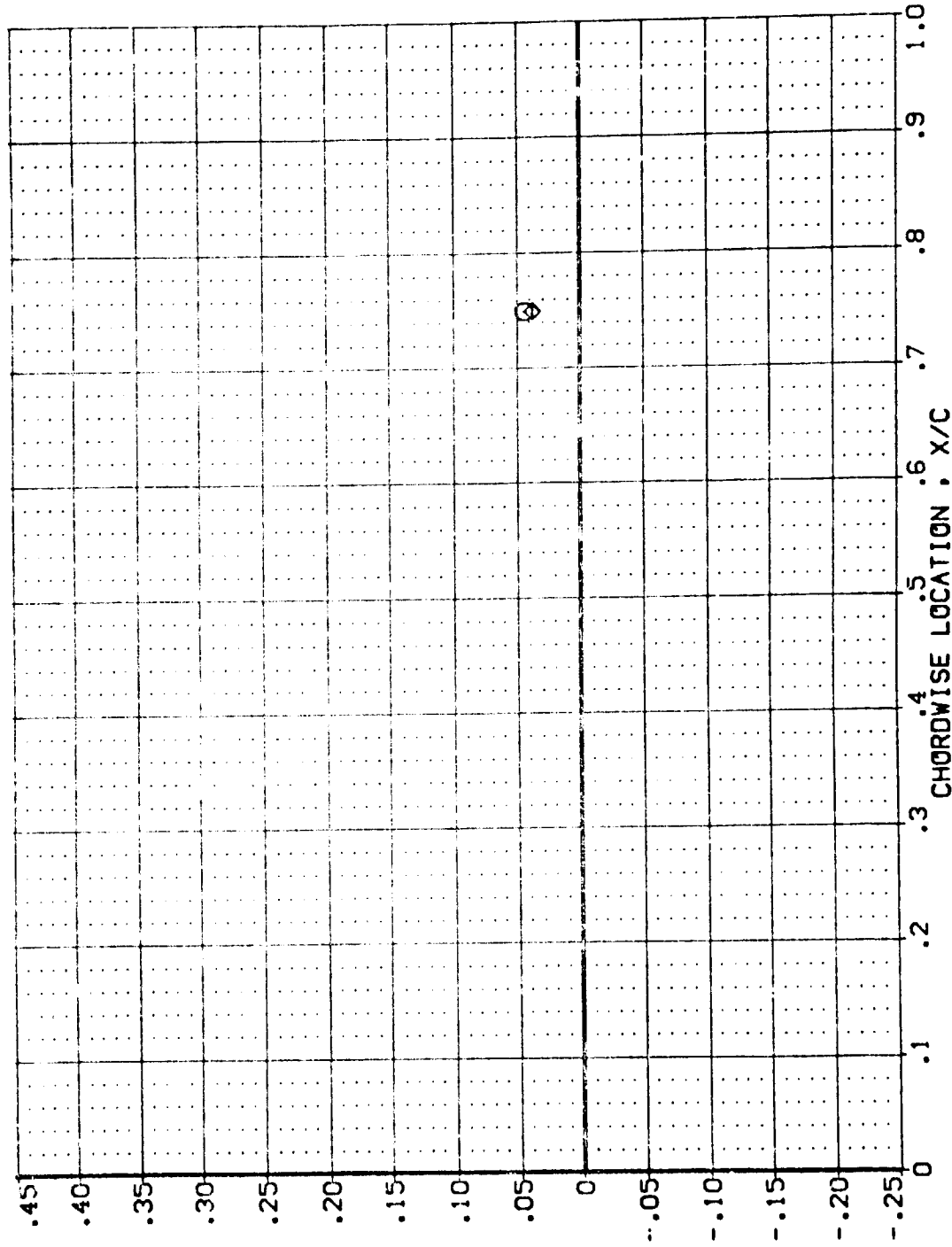
DATA SET SYMBOL

(LBZC37)
(LBZC37)
(LBZC37)

CONFIGURATION DESCRIPTION
AVES 87-710 [A]2C 0 T] S] LOWER WING PRESSURE
AVES 87-710 [A]2C 0 T] S] LOWER WING PRESSURE
AVES 87-710 [A]2C 0 T] S] LOWER WING PRESSURE

POWER .000
GPR .000
S2-PR 3.000
GIMBAL 4.000

PRESSURE COEFFICIENT • CP



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .780 PAGE 467

DATA SET 51888 CONFIGURATION DESCRIPTION

(LBZ097)
(LBZ097)
(LBZ098)

AVES 87-710 [A] [C] [I] [T] [S] LOWER WING PRESSURE
AVES 87-710 [A] [C] [I] [T] [S] LOWER WING PRESSURE
AVES 87-710 [A] [C] [I] [T] [S] LOWER WING PRESSURE

POWER 0.000
POWER 0.000
POWER 0.000

OVER

0.000

0.000

0.000

0.000

0.000

0.000

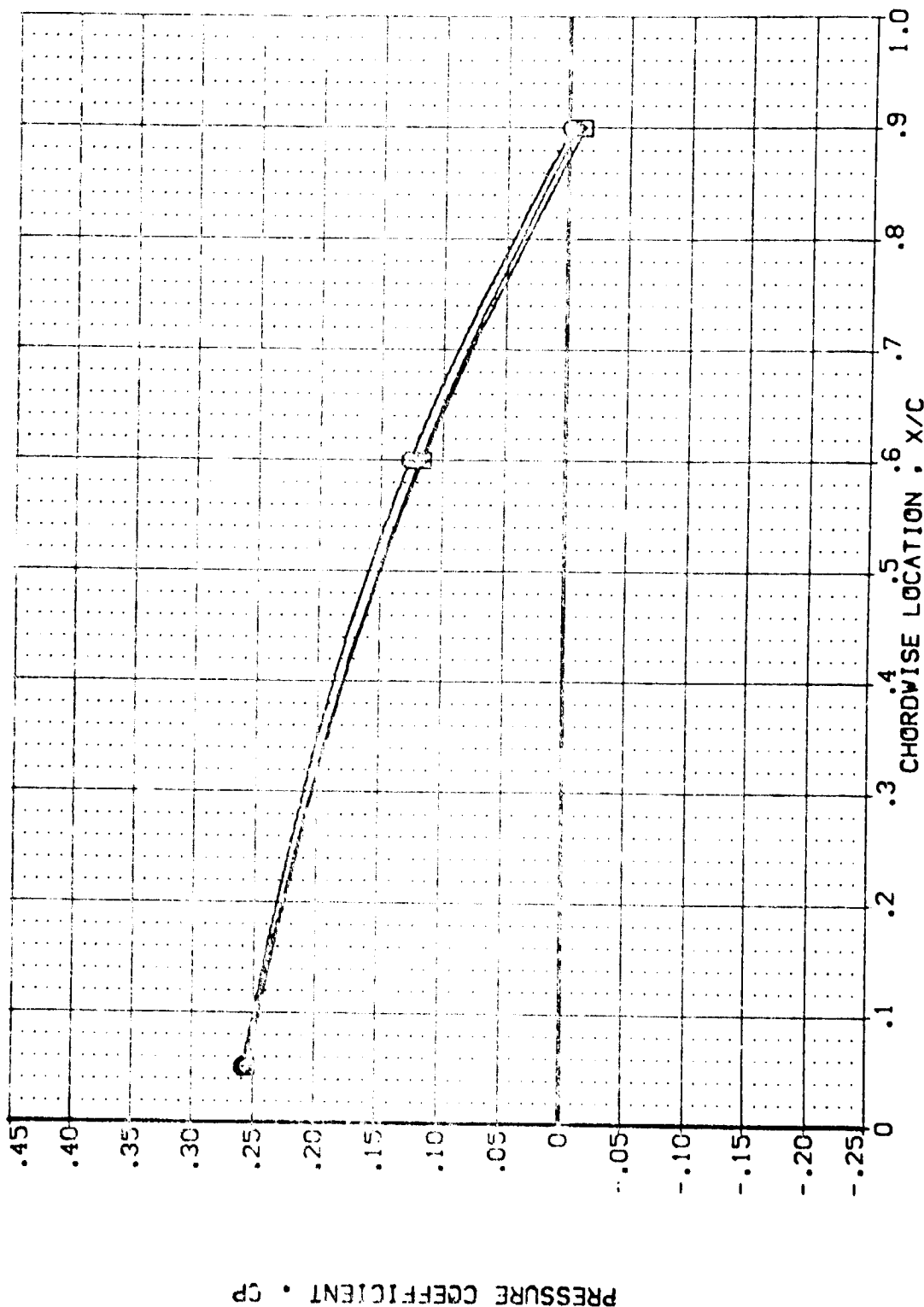
0.000

0.000

0.000

0.000

0.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 2.500 ALPHA = 6.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(L57102)
(L57103)
(L57104)

AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

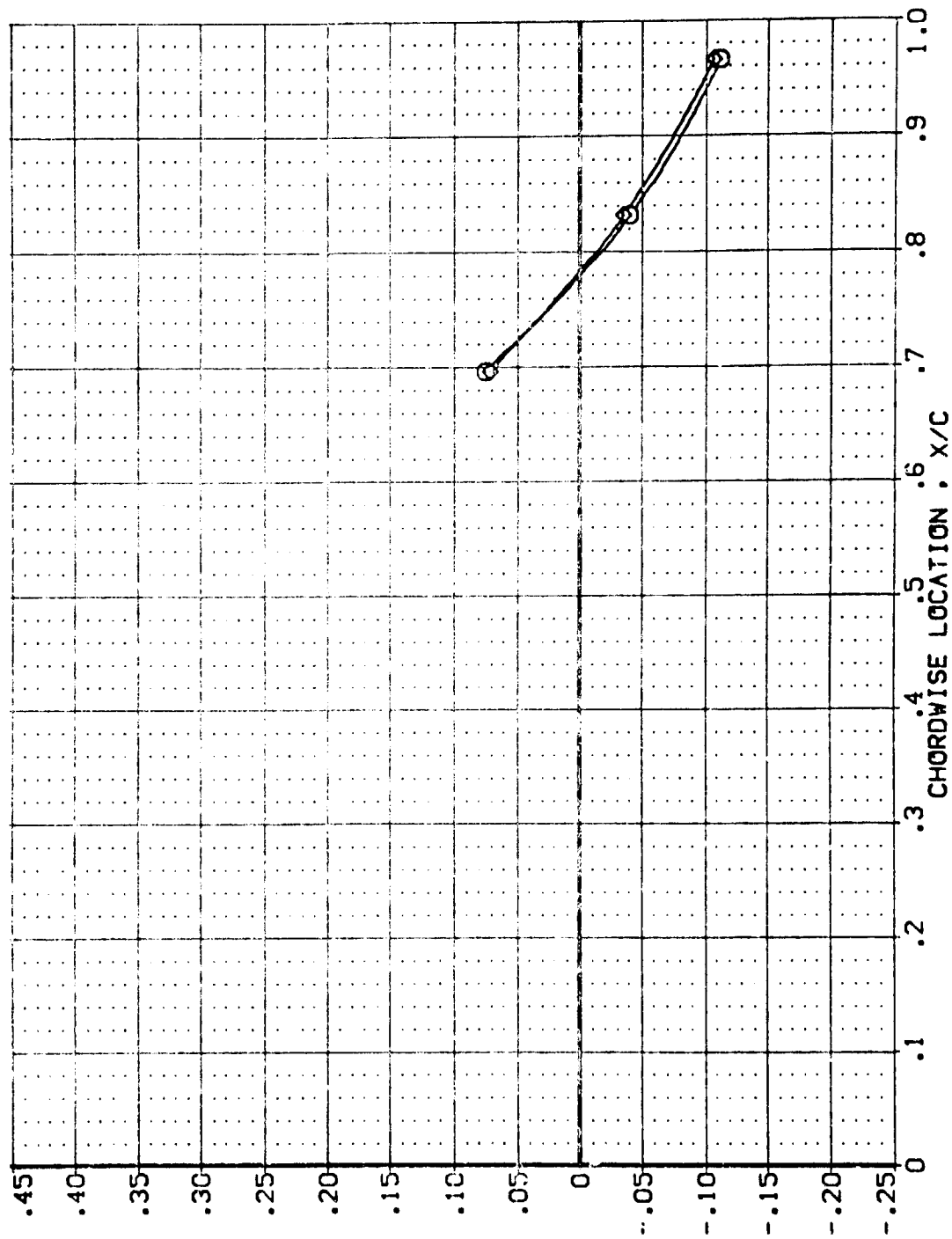
POWER 0.000
POWER 0.000
POWER 0.000

G/R

SWPR




GIMBAL
4.000
1.000
3.000

PRESSURE COEFFICIENT, CP

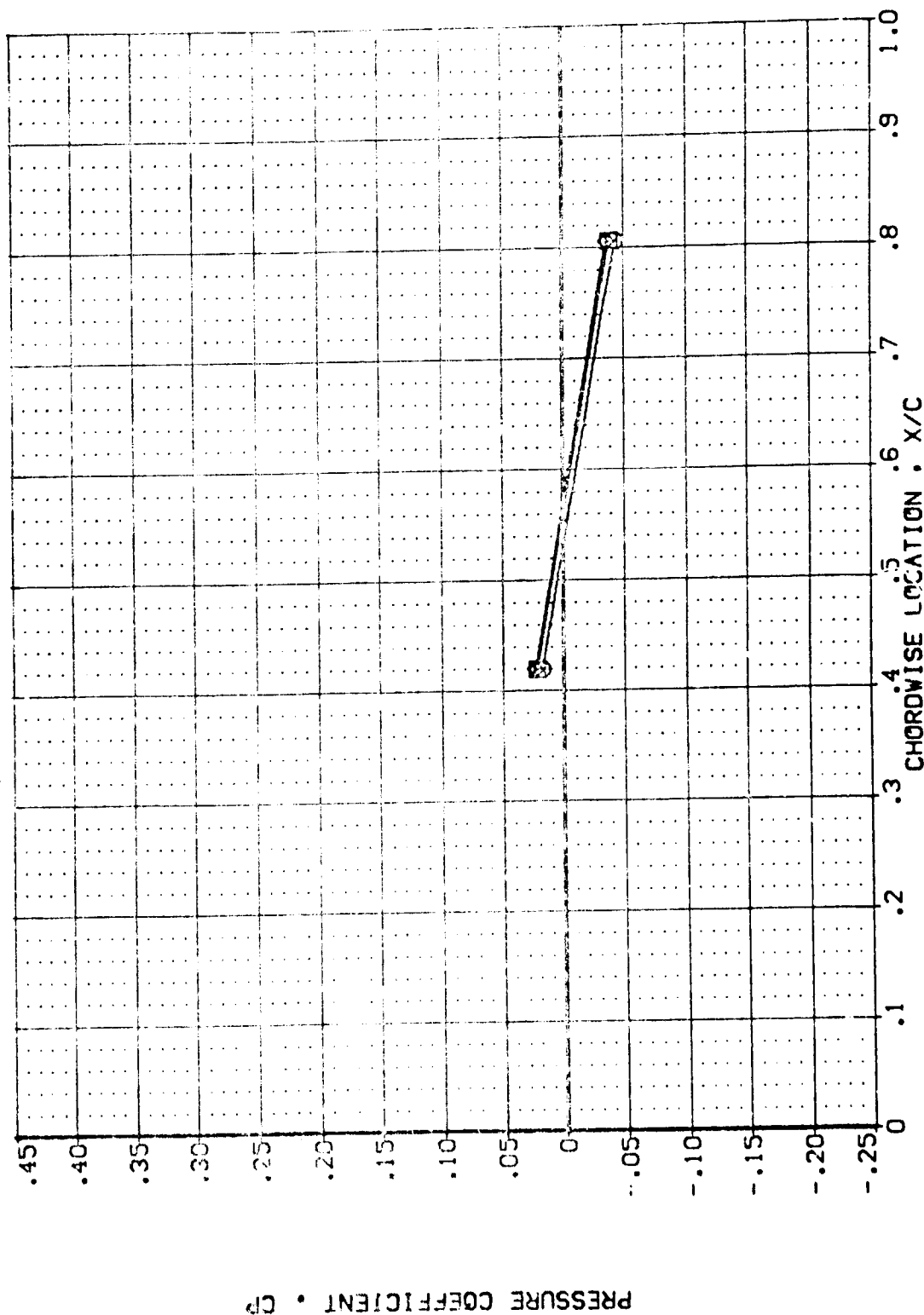


POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.000 ALPHA = -4.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LB7102)  ASES 67-710 (AL2C 01 T1 S1) LOWER WING PRESSURE
 (LB7029)  ASES 87-710 (AL2C 01 T1 S1) LOWER WING PRESSURE
 (LB7065)  ASES 87-710 (AL2C 01 T1 S1) LOWER WING PRESSURE

POWER C/P SOURCE GIMBAL
 .000
 .000
 .000
 4.000
 1.000
 1.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

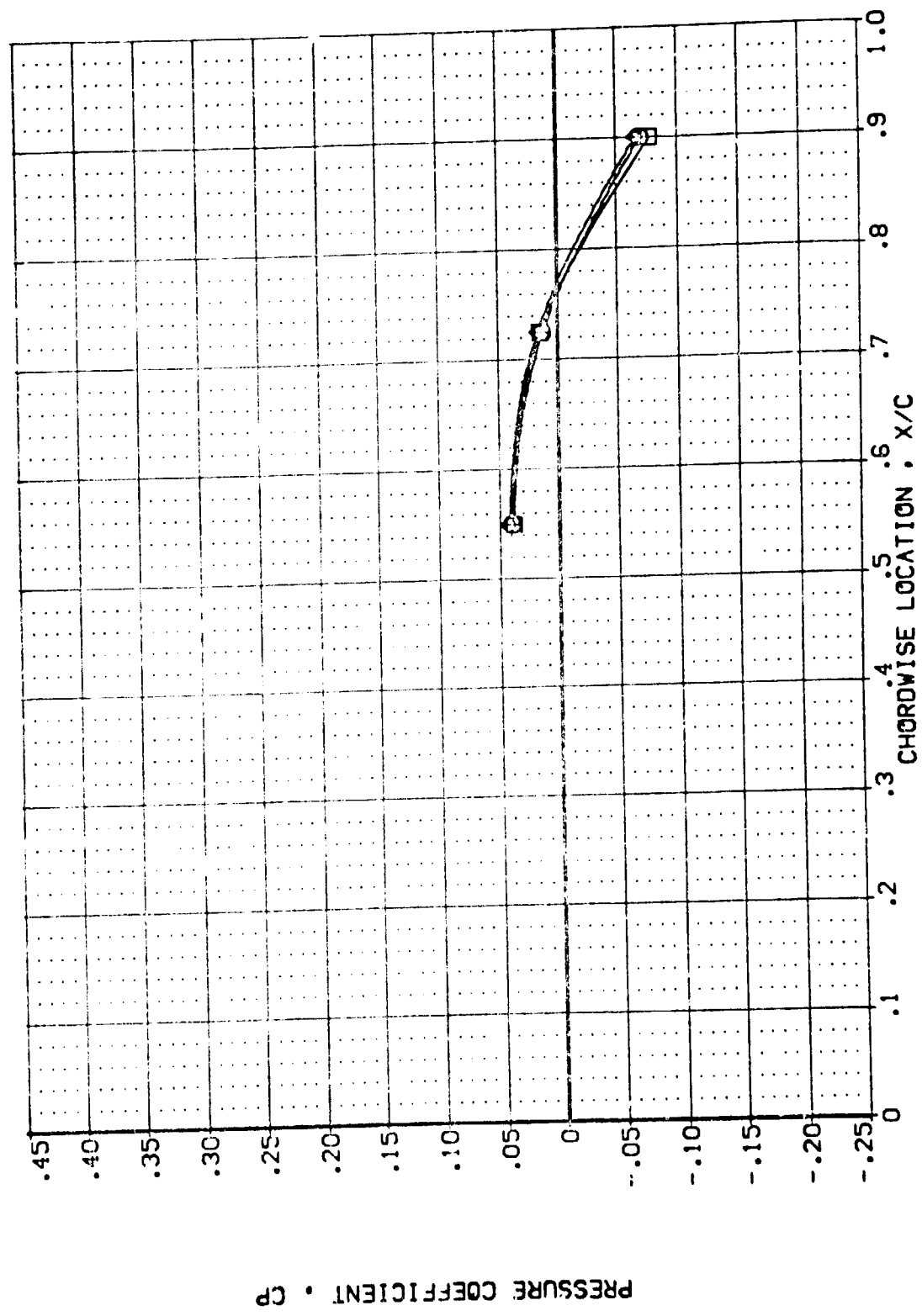
MACH = 3.000 ALPHA = -4.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SFR GIMBAL

(LB2102) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 1.000 1.000

(LB2038) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 1.000 1.000

(LB2085) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 1.000 1.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

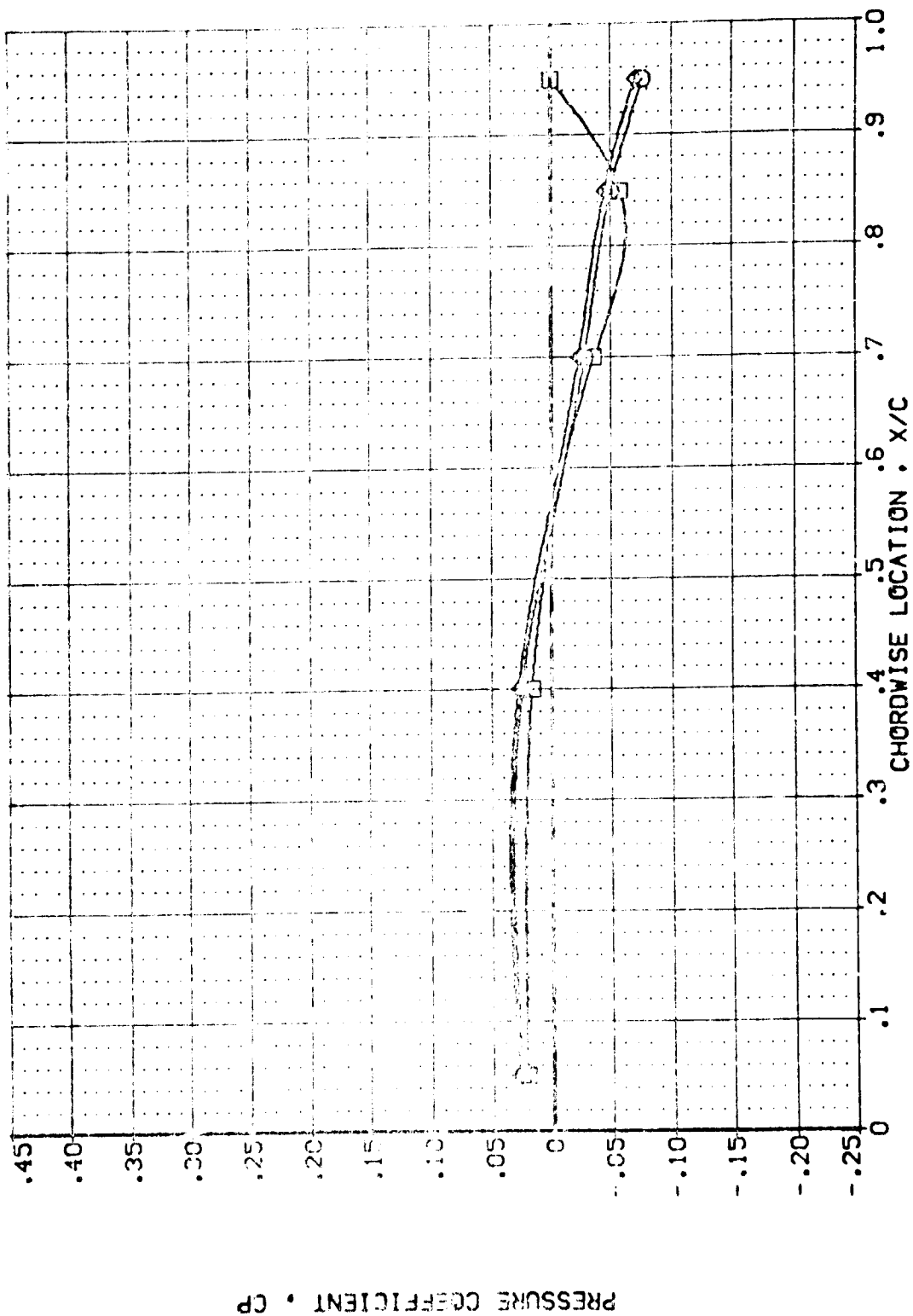
MACH = 3.000 ALPHA = -4.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ102)
(LBZ033)
(LBZ066)

YES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE
YES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE
YES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE

POWER 0.000
GIR 0.000
GIR 0.000
GIR 0.000



PRESSURE COEFFICIENT, CP

CHORDWISE LOCATION, X/C

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -4.000 Y/B = .673

PAGE 472

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ102)
(LBZC28)
(LBZC05)

AVES 87-710
AVES 87-710
AVES 87-710

1A12C 01 T1 S1
1A12C 01 T1 S1
1A12C 01 T1 S1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

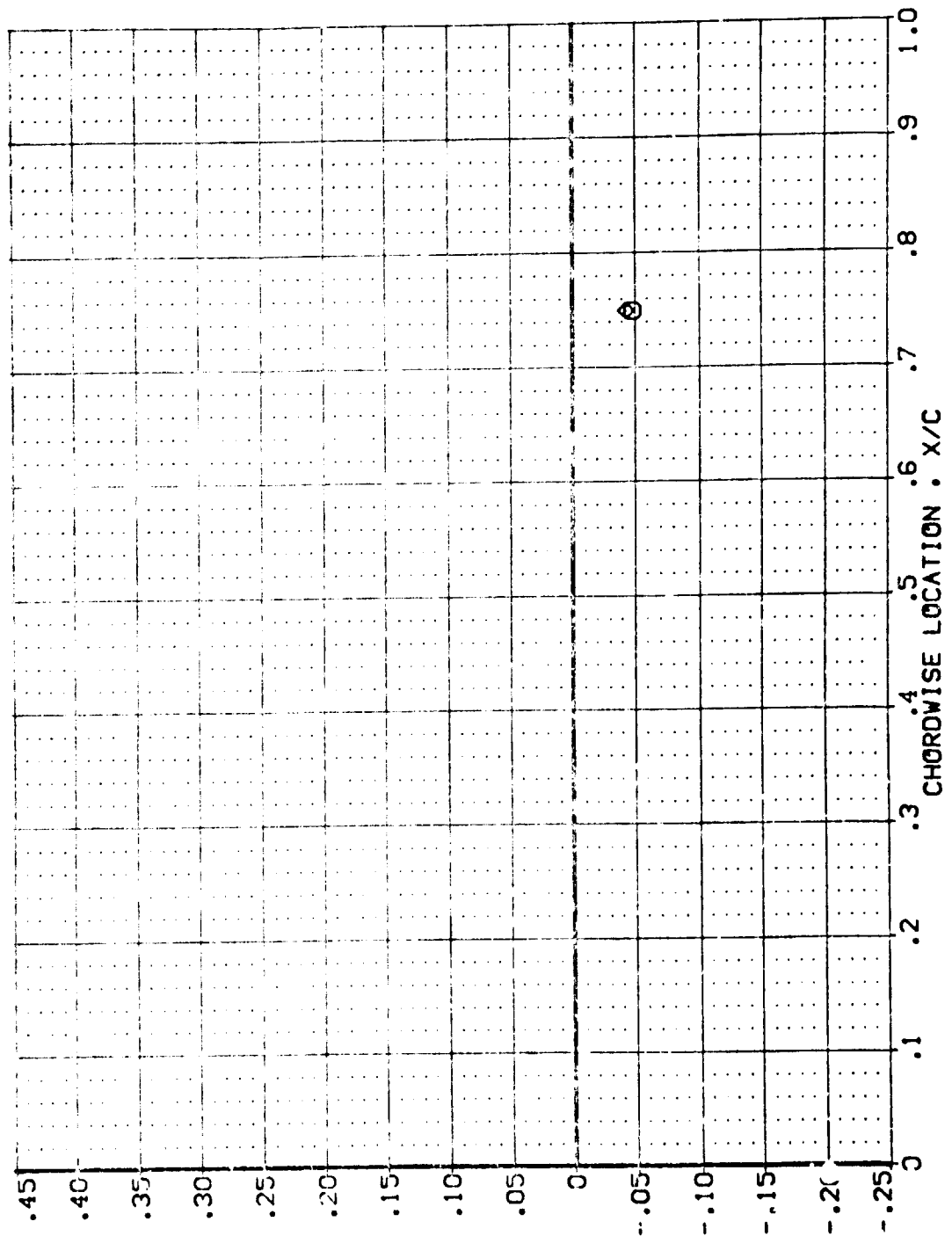
POWER .000
POWER .000
POWER .000

OPR

SNOWR

GIMBAL 4.000
GIMBAL 1.000
GIMBAL 3.000

PRESSURE COEFFICIENT • CP



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -4.000 Y/B = .780

DATA SET SYMBOL

(L8Z102)
(L8Z036)
(L8Z065)

CONFIGURATION DESCRIPTION

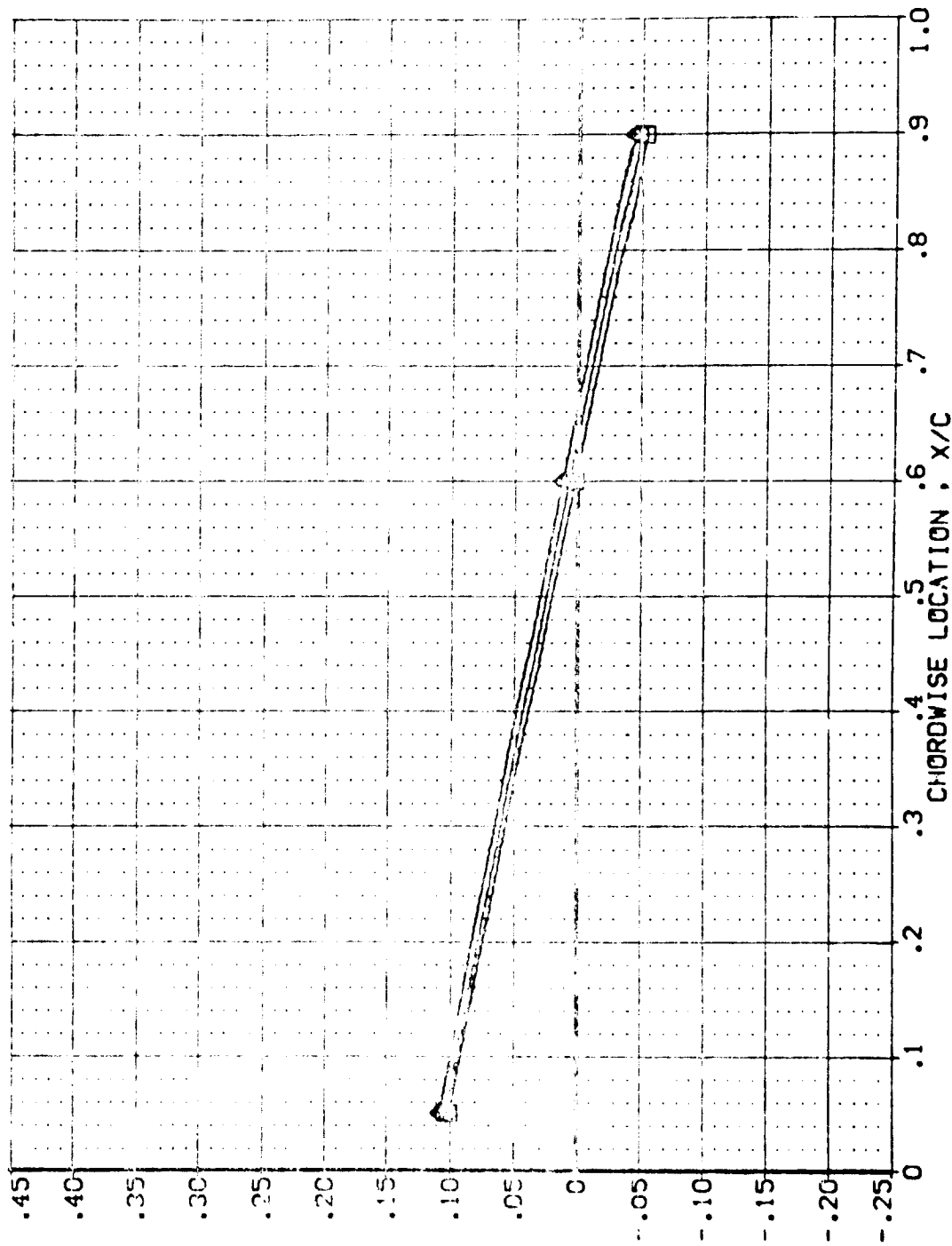
AVES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE

POWER 0.000
0.000
0.000

COVER

GIMBAL
4.000
1.000
3.000

PRESSURE COEFFICIENT, CP



POWER-OFF NOZZLE GIMBAL. ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.000 ALPHA = -4.000 Y/B = .887

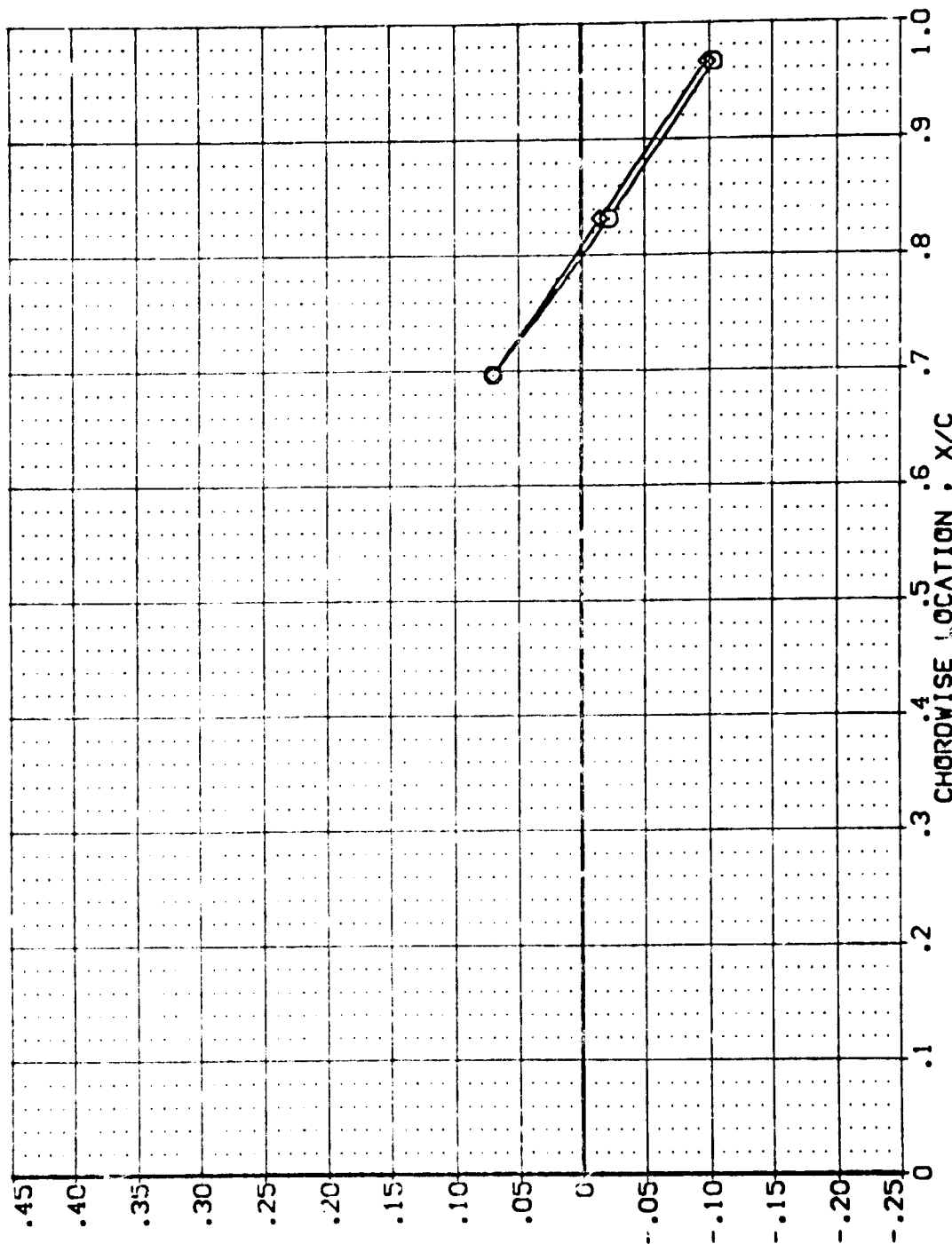
DATA SET SYMBOL
(L82102)
(L82098)
(L82085)

CONFIGURATION DESCRIPTION
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE

POWER .000
GPR .000
GIMBAL 4.000
1.000
3.000

STPR

GIMBAL
4.000
1.000
3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .299

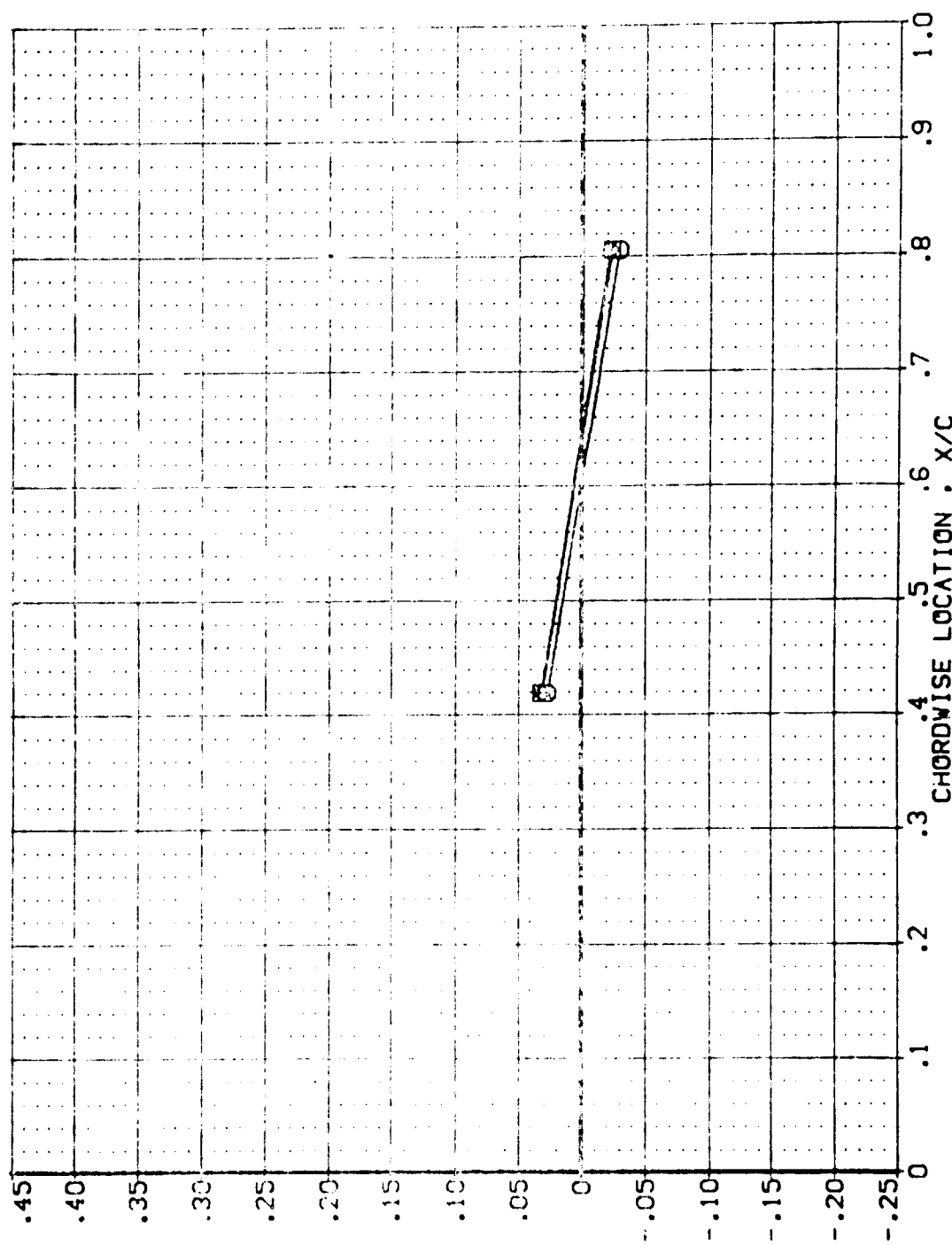
PAGE 475

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/C-FR GIMBAL

(LBZ102) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 4.000

(LBZ033) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 1.000

(LBZ065) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .427

PAGE 476

DATA SET SYMBOL

(LB-102)
(LB-103)
(LB-104)

CONFIGURATION DESCRIPTION

AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER

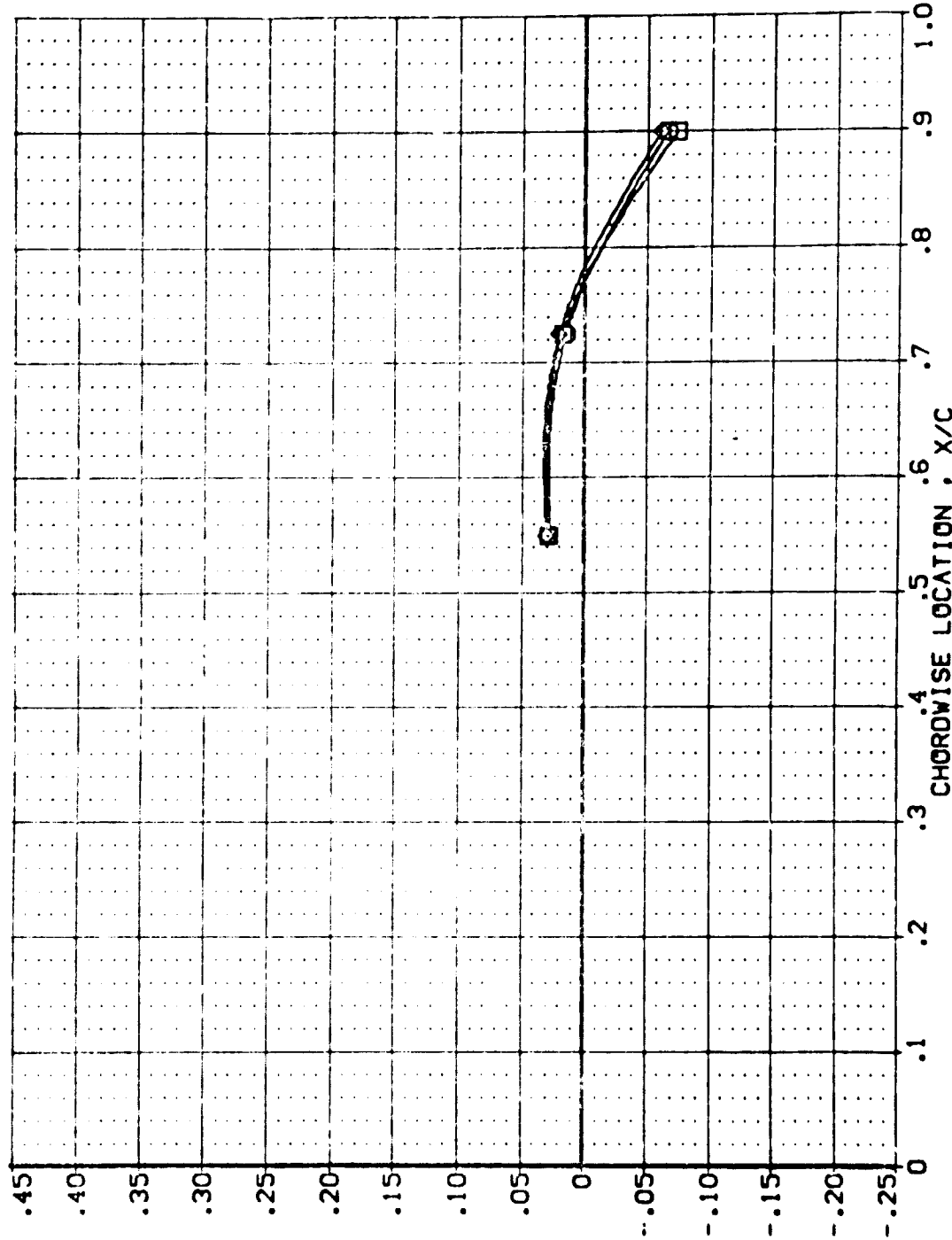
.000
.000
.000

OPR

SR PR

GIMBAL

4.000
1.000
3.000



PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

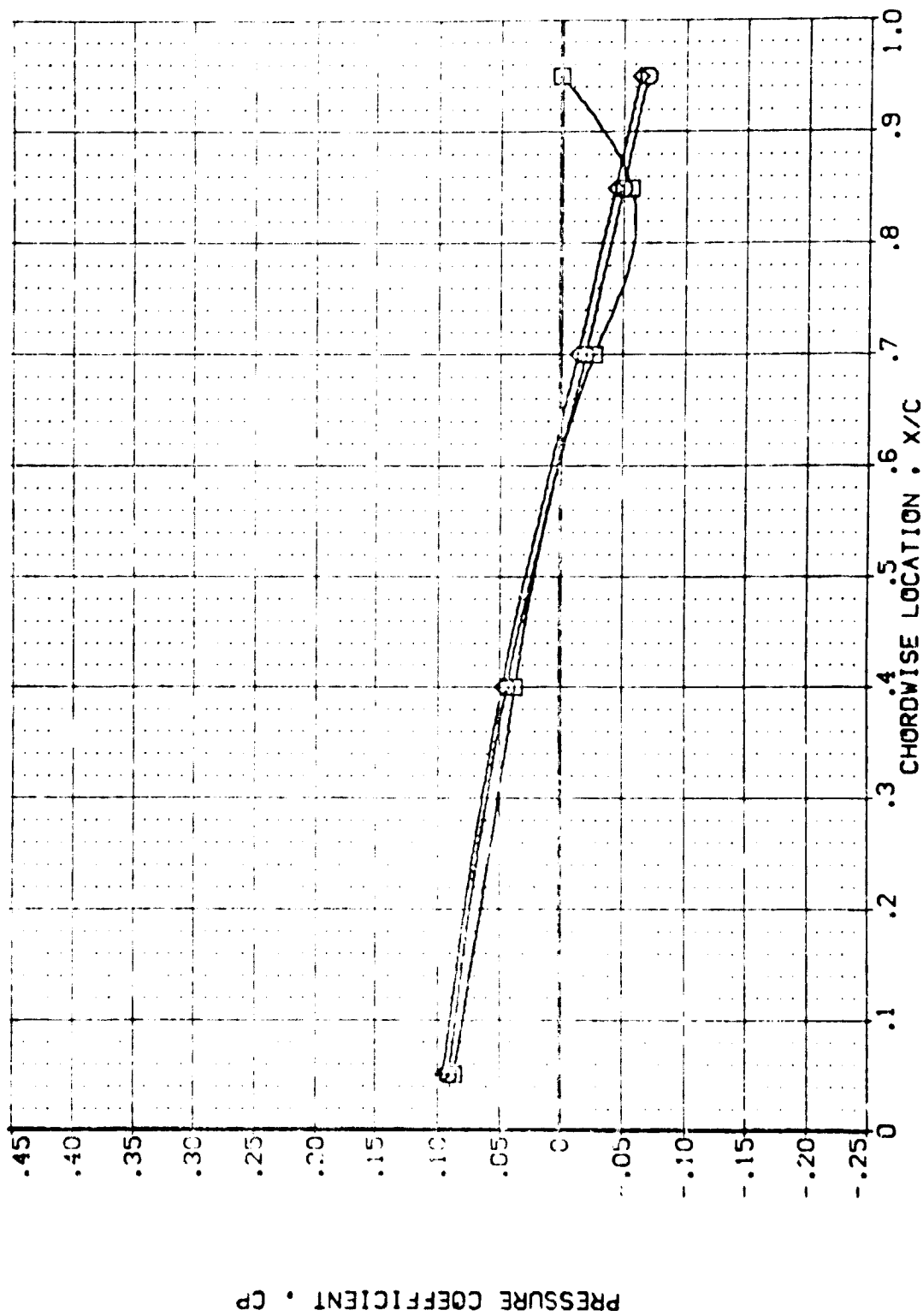
MACH = 3.000 ALPHA = .000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/F S/F GIMBAL

(LBZ102) ARES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE .000 .000 4.000

(LBZ103) ARES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE .000 .000 1.000

(LBZ005) ARES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE .000 .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .673 PAGE 478

57

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ102)
(LBZ038)
(LBZ085)

AVES 87-710
AVES 87-710
AVES 87-710

LA12C 01 T1 S1
LA12C 01 T1 S1
LA12C 01 T1 S1

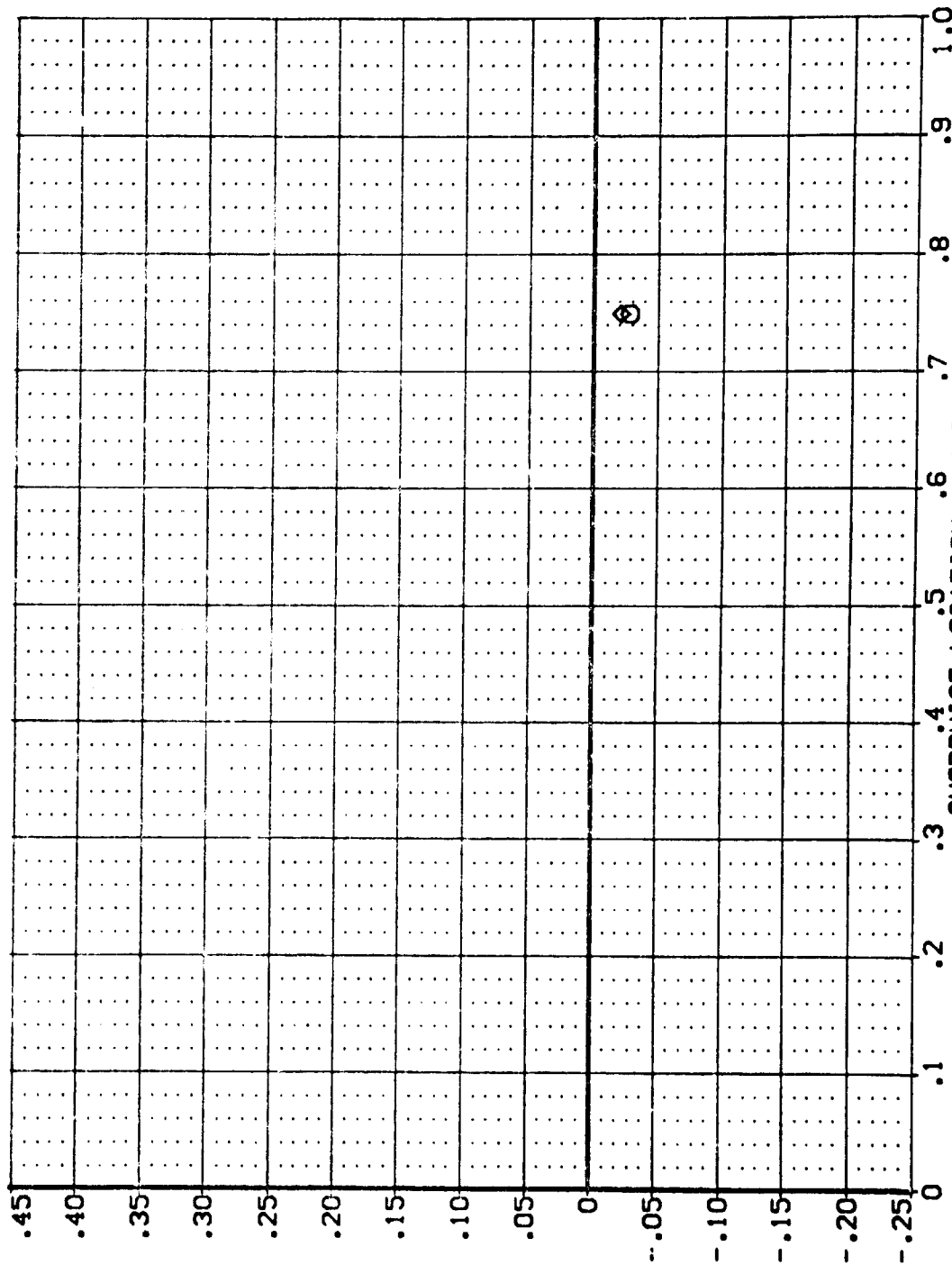
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER .000
POWER .000

GPR

SPR

GIMBAL
4.000
1.000
3.000



PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

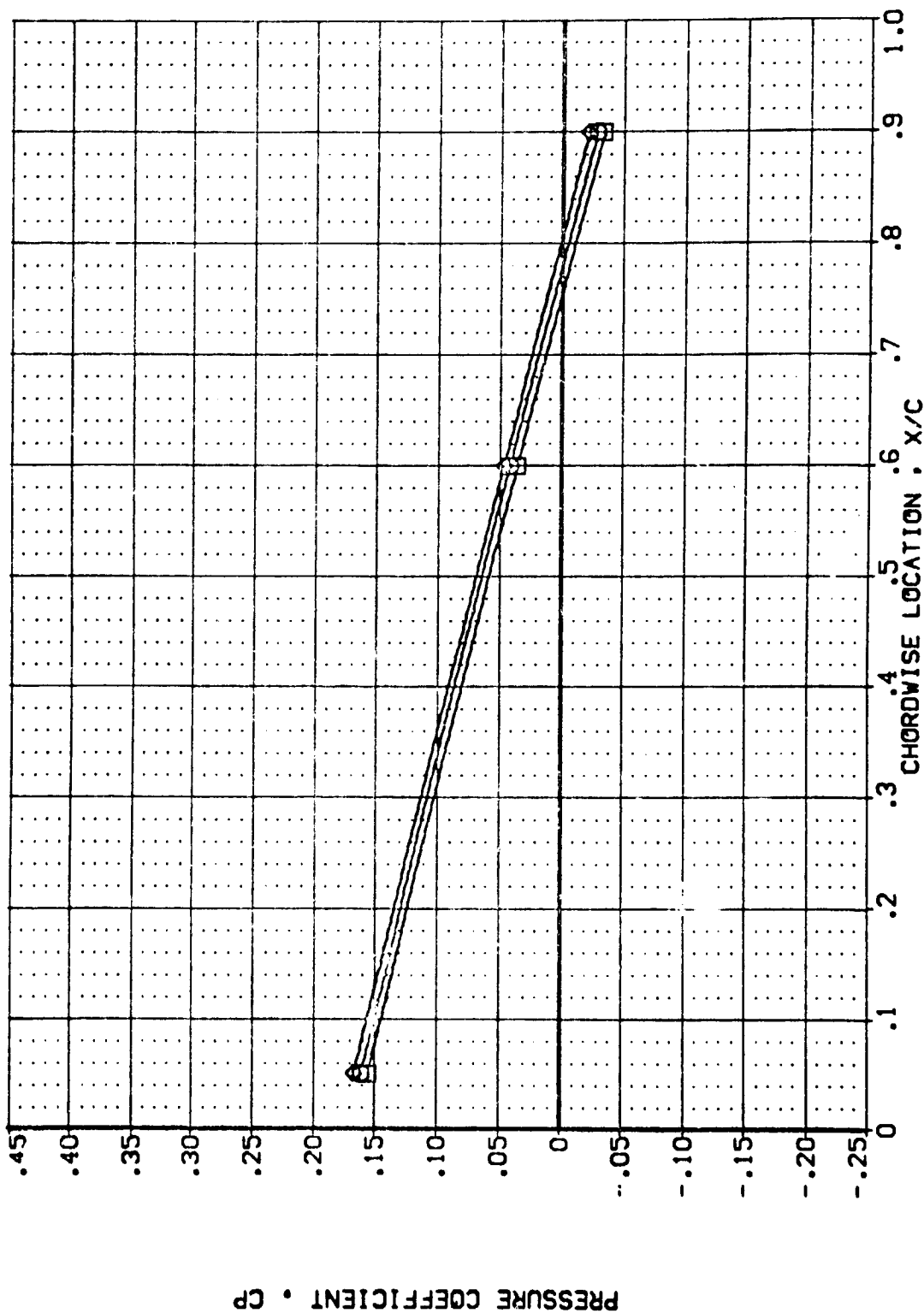
MACH = 3.000 ALPHA = .000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ102)
(LBZ038)
(LBZ065)

AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER GPR SWPR GIMBAL
.000
.000
4.000
1.000
3.000



PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

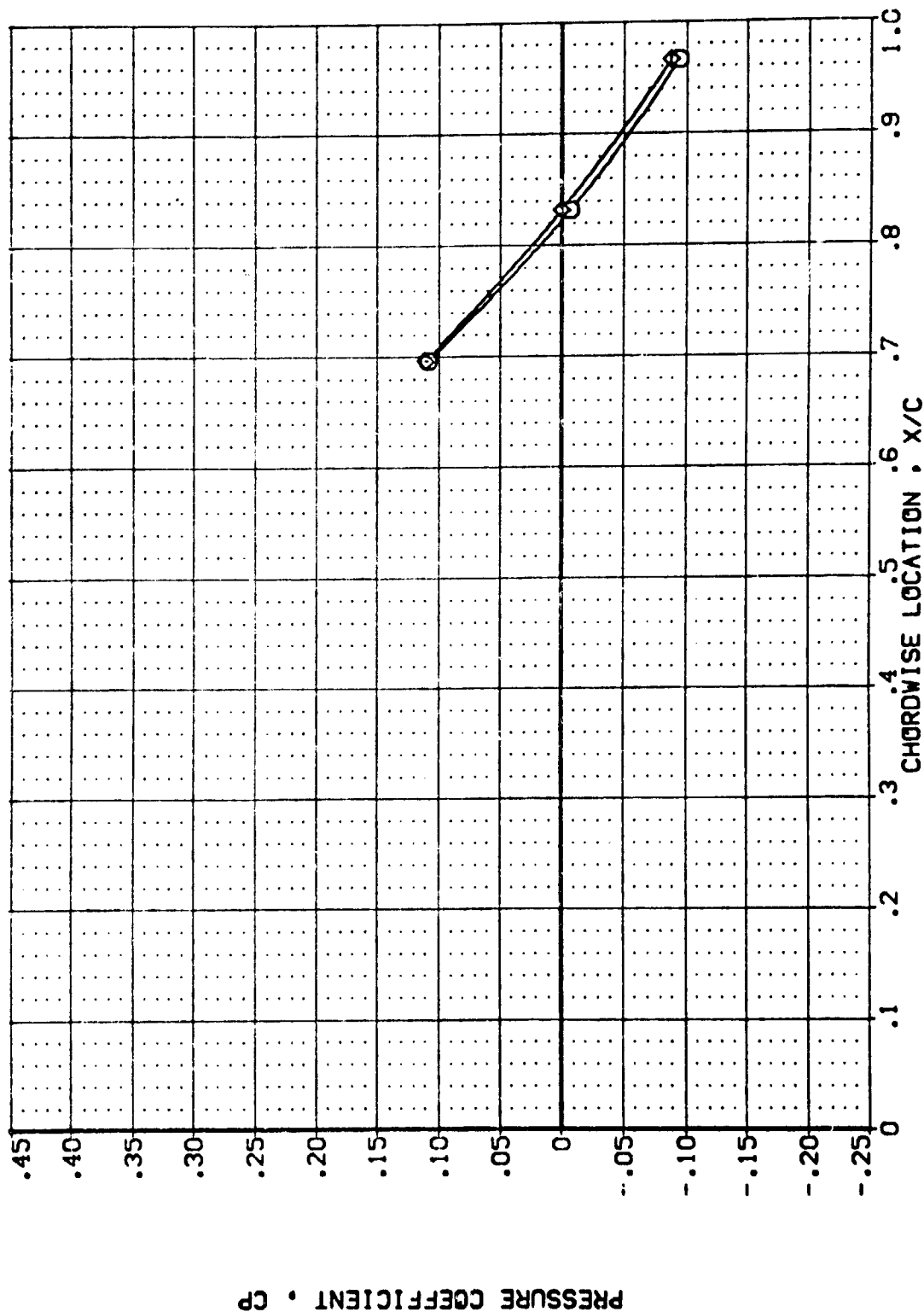
MACH = 3.000 ALPHA = .000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/P/R GIMBAL

(LBZ102) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 .000 4.000

(LBZ038) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 .000 1.000

(LBZ085) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 .000 3.000

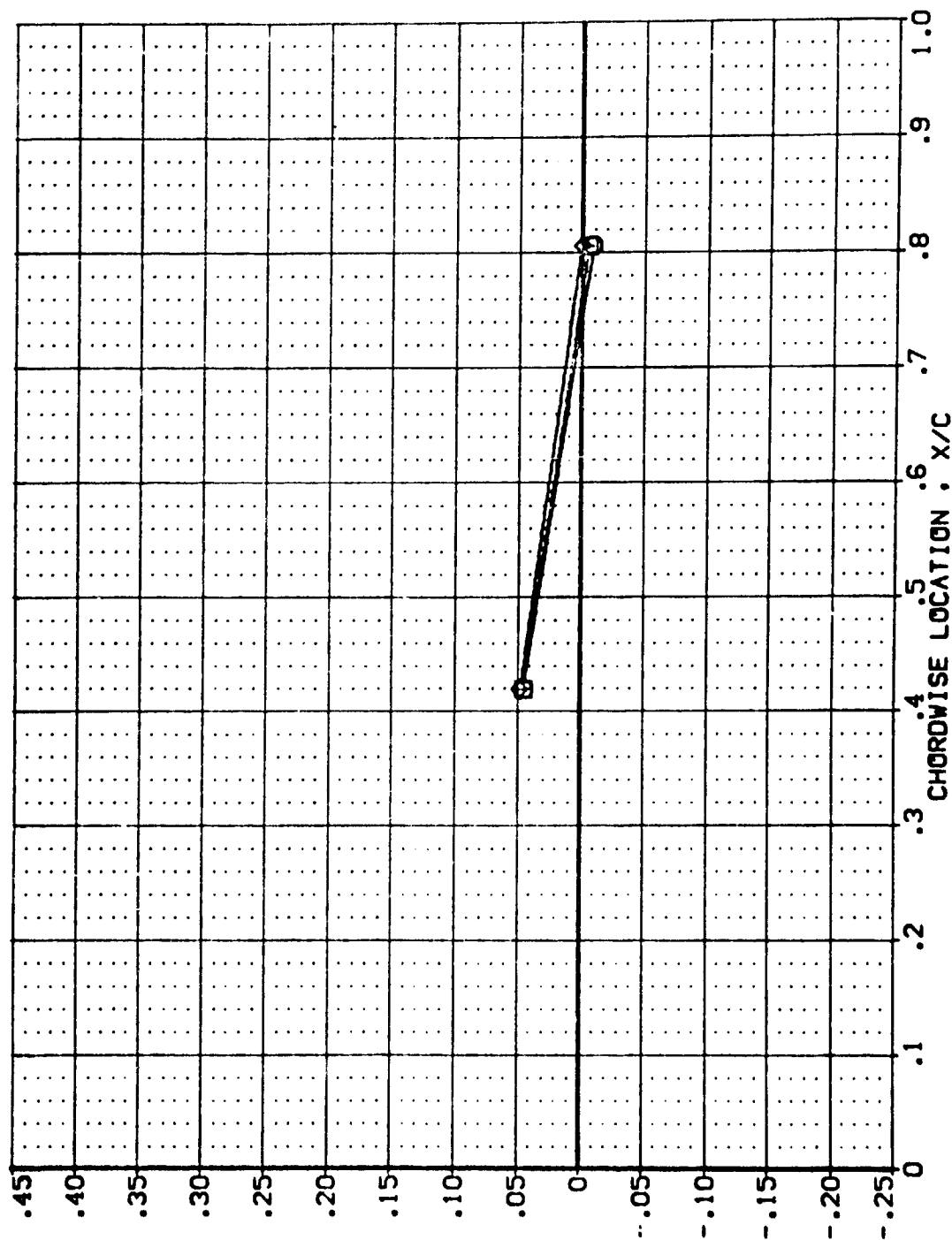


POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZ102) AYES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE
 (LBZ008) AYES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE
 (LBZ005) AYES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE

POWER DFR SDFR GIMBAL
 .000 .000 .000 4.000
 .000 .000 .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .427

PAGE 482

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB2102)
(LB2030)
(LB2085)

AVES 87-710
AVES 87-710
AVES 87-710

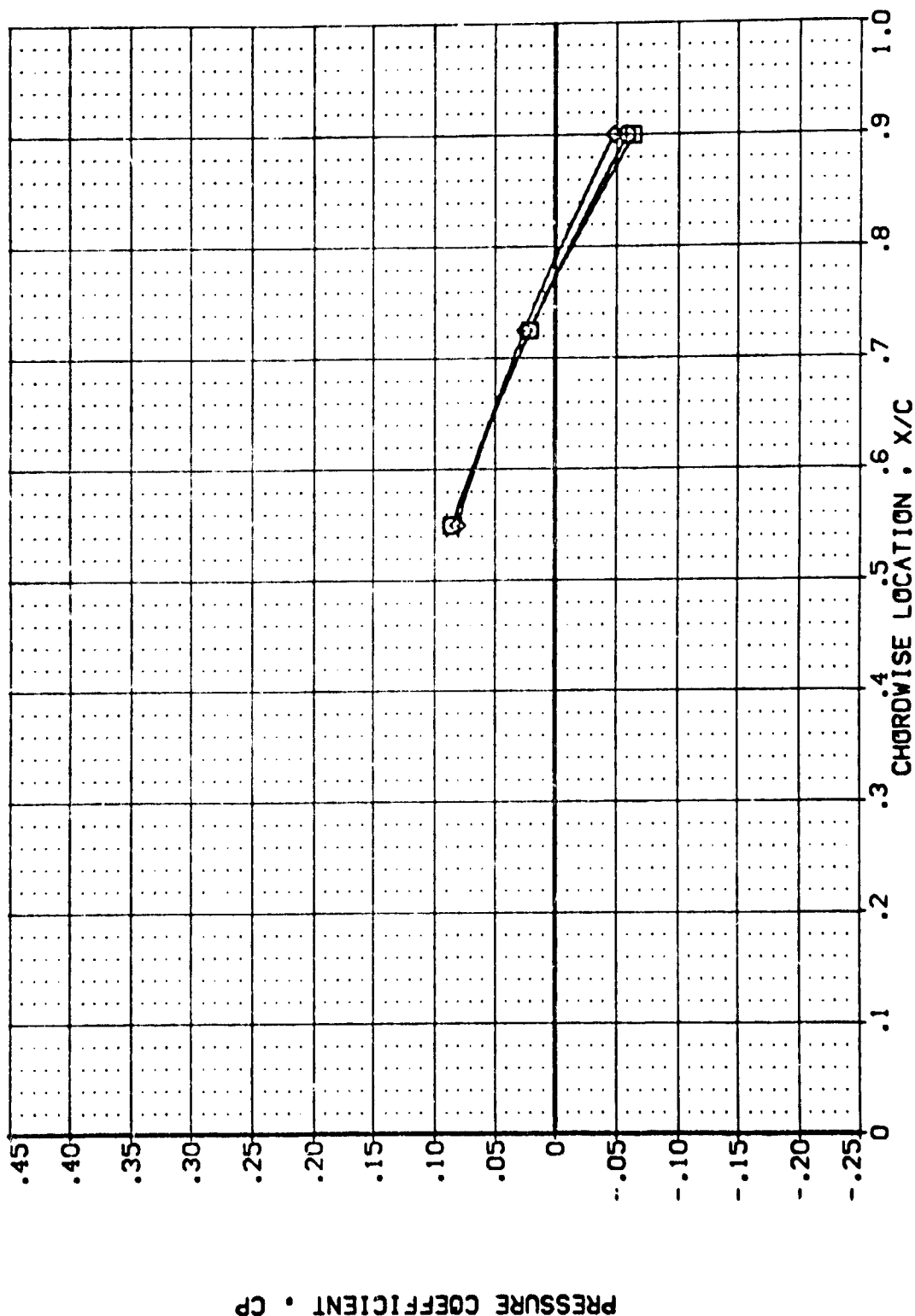
AI12C 01 TI SI
AI12C 01 TI SI
AI12C 01 TI SI

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER .000
POWER .000
POWER .000

SPWR

GIMBAL
4.000
1.000
3.000

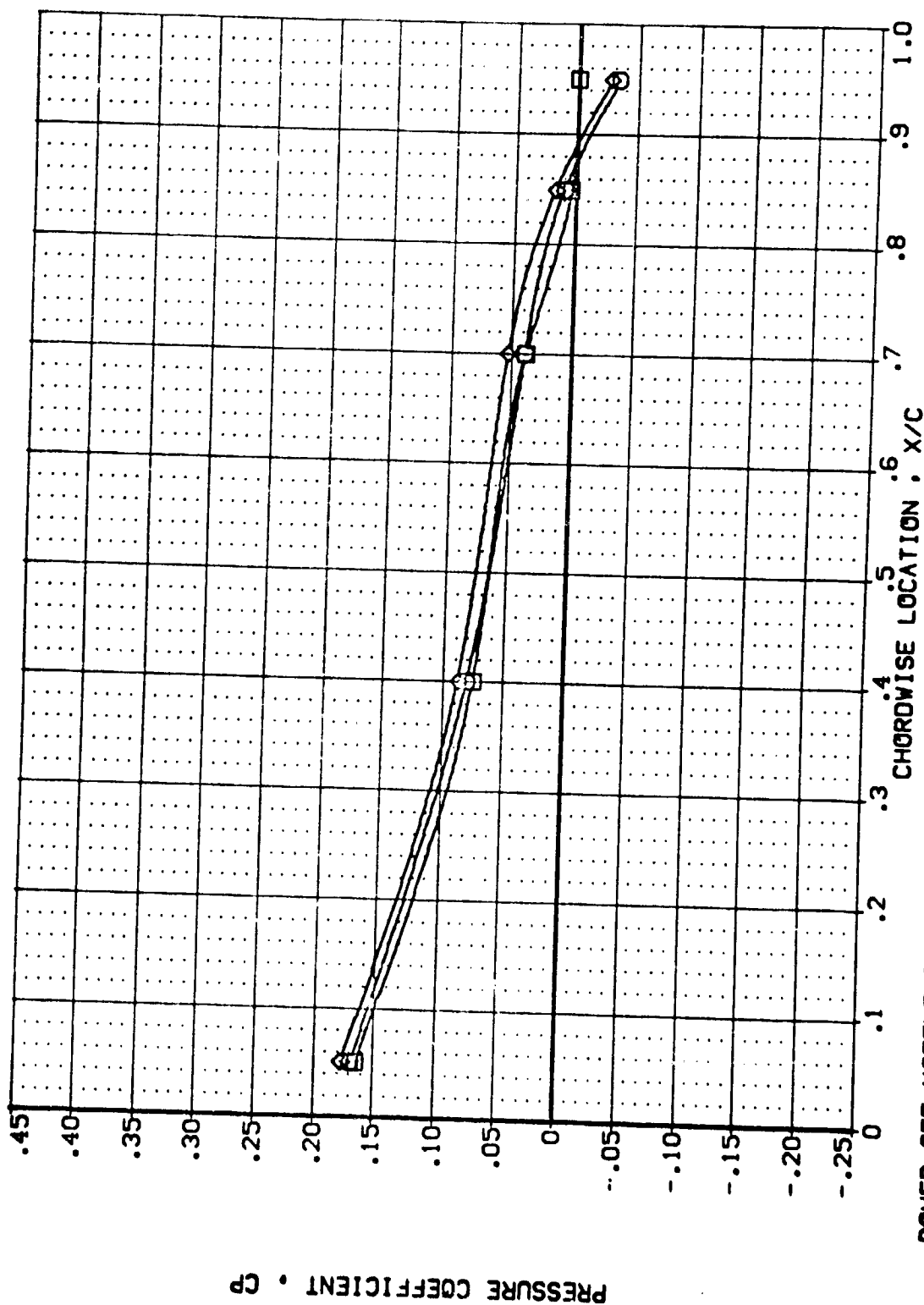


POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

SYMBOL	CONFIGURATION	DESCRIPTION	POWER	OPR	SWPR	GIMBAL
(LBZ102)	AVES 87-710	1A12C 01 T1 S1 LOWER WING PRESSURE	.000			4.000
(LBZ078)	AVES 87-710	1A12C 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LBZ085)	AVES 87-710	1A12C 01 T1 S1 LOWER WING PRESSURE	.000			3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ102)
(LBZ038)
(LBZ085)

AVES 87-710
AVES 87-710
AVES 87-710

LA12C 01 T1 S1
LA12C 01 T1 S1
LA12C 01 T1 S1

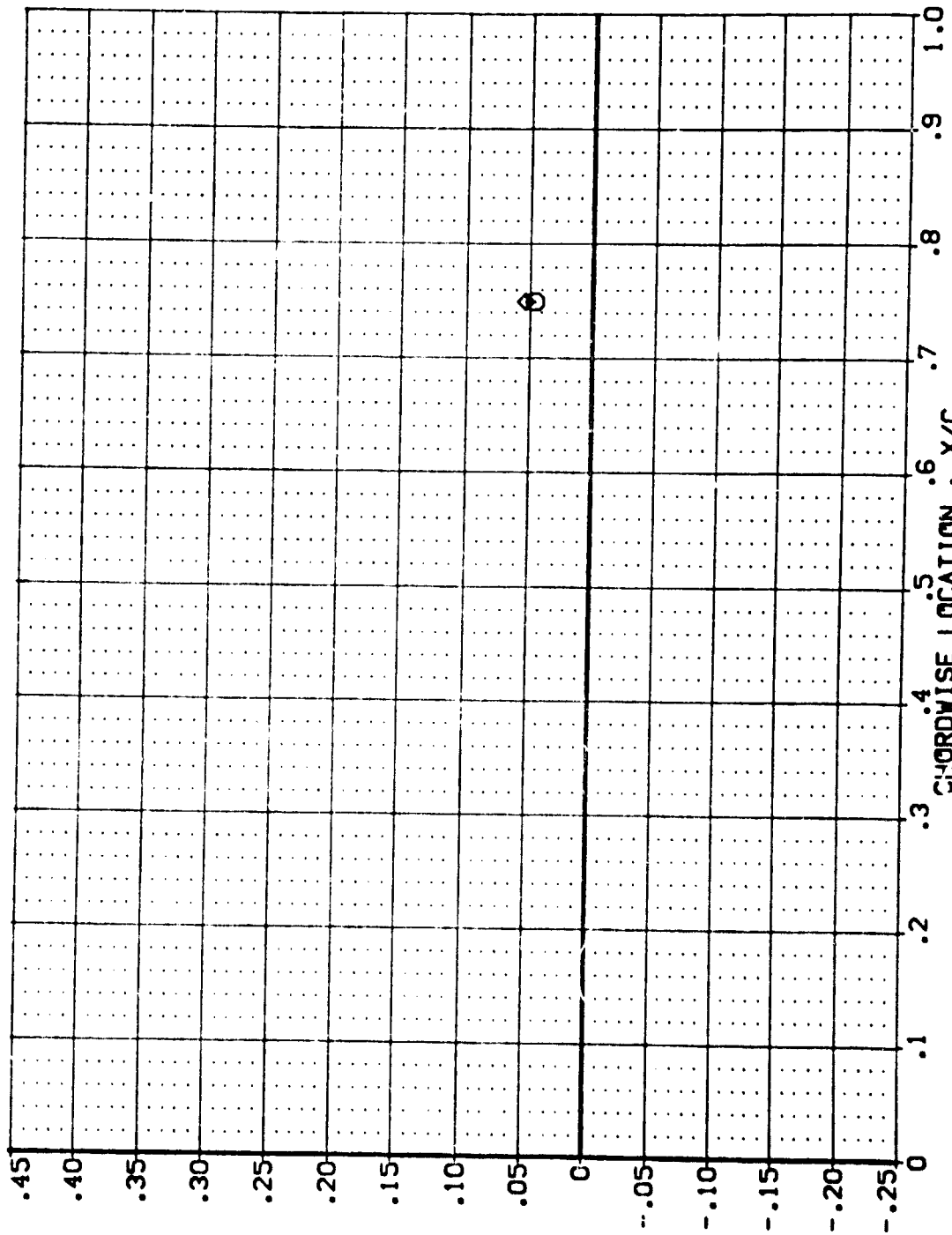
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER 0.000
POWER 0.000
POWER 0.000

OPR

SVPR

GIMBAL
4.000
1.000
3.000



PRESSURE COEFFICIENT • CP

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

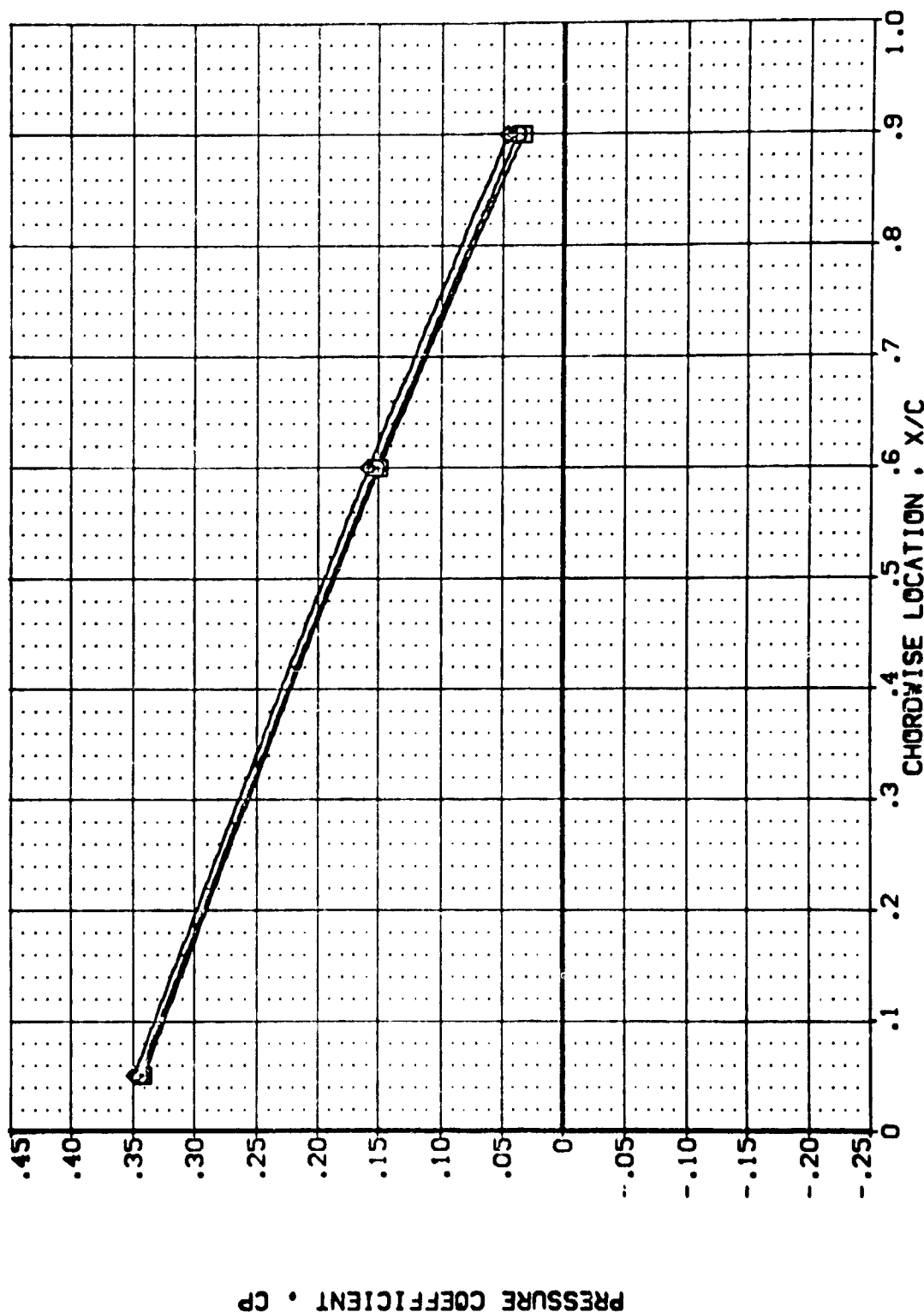
MACH = 3.000 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CPR SUPER GIMBAL

(LBZ102) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 .000 4.000

(LBZ038) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 .000 1.000

(LBZ085) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .887

PAGE 486

DATA SET SYMBOL

(LBZ106)
(LBZ046)
(LBZ089)

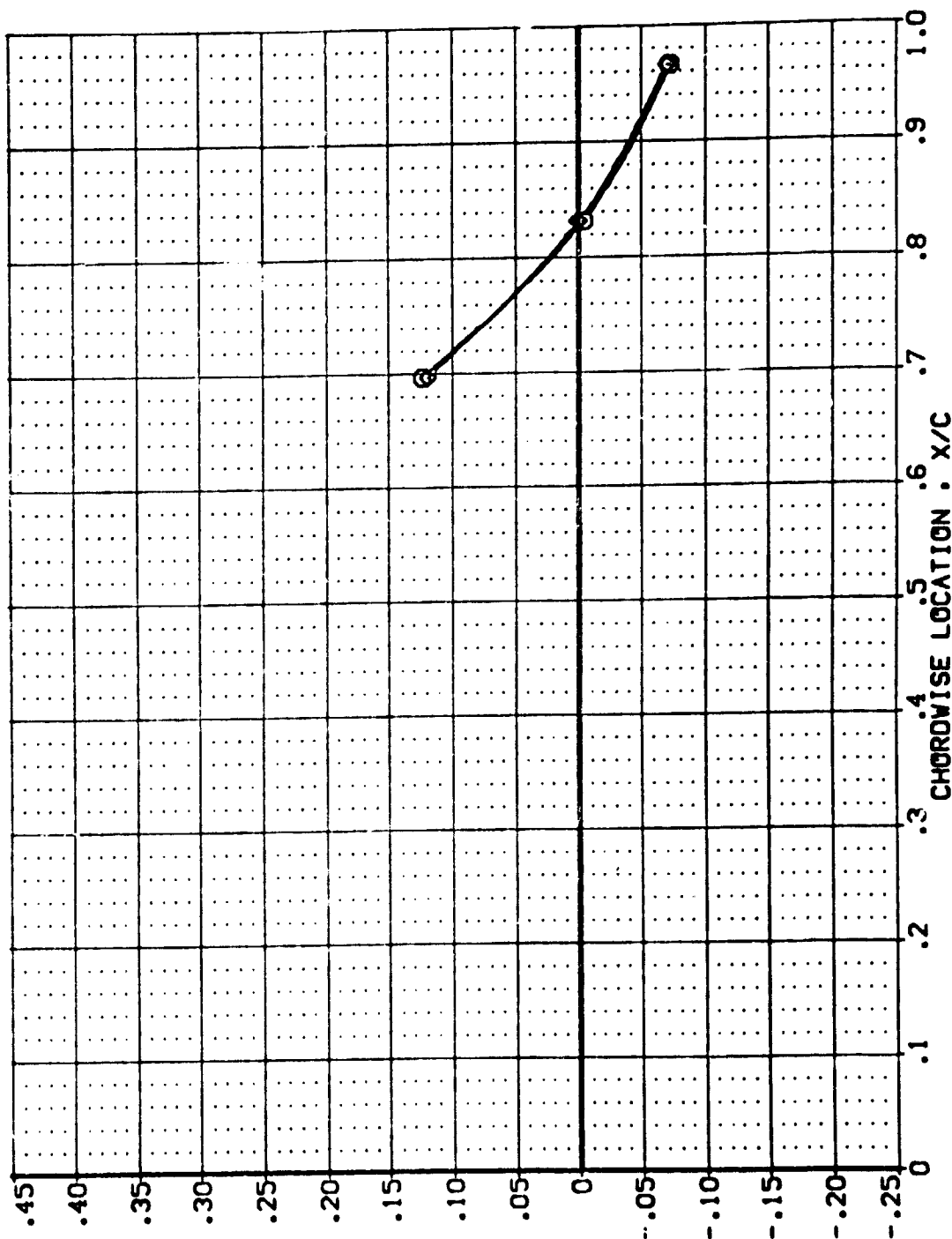
CONFIGURATION DESCRIPTION
AVES 87-710
AVES 87-710
AVES 87-710

POWER GFR SFRP GIMBAL
.000
.000
.000
4.000
1.000
3.000

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER GFR SFRP

GIMBAL
4.000
1.000
3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .299 PAGE 487

DATA SET SYMBOL

(LBZ106)
(LBZ046)
(LBZ088)

CONFIGURATION DESCRIPTION

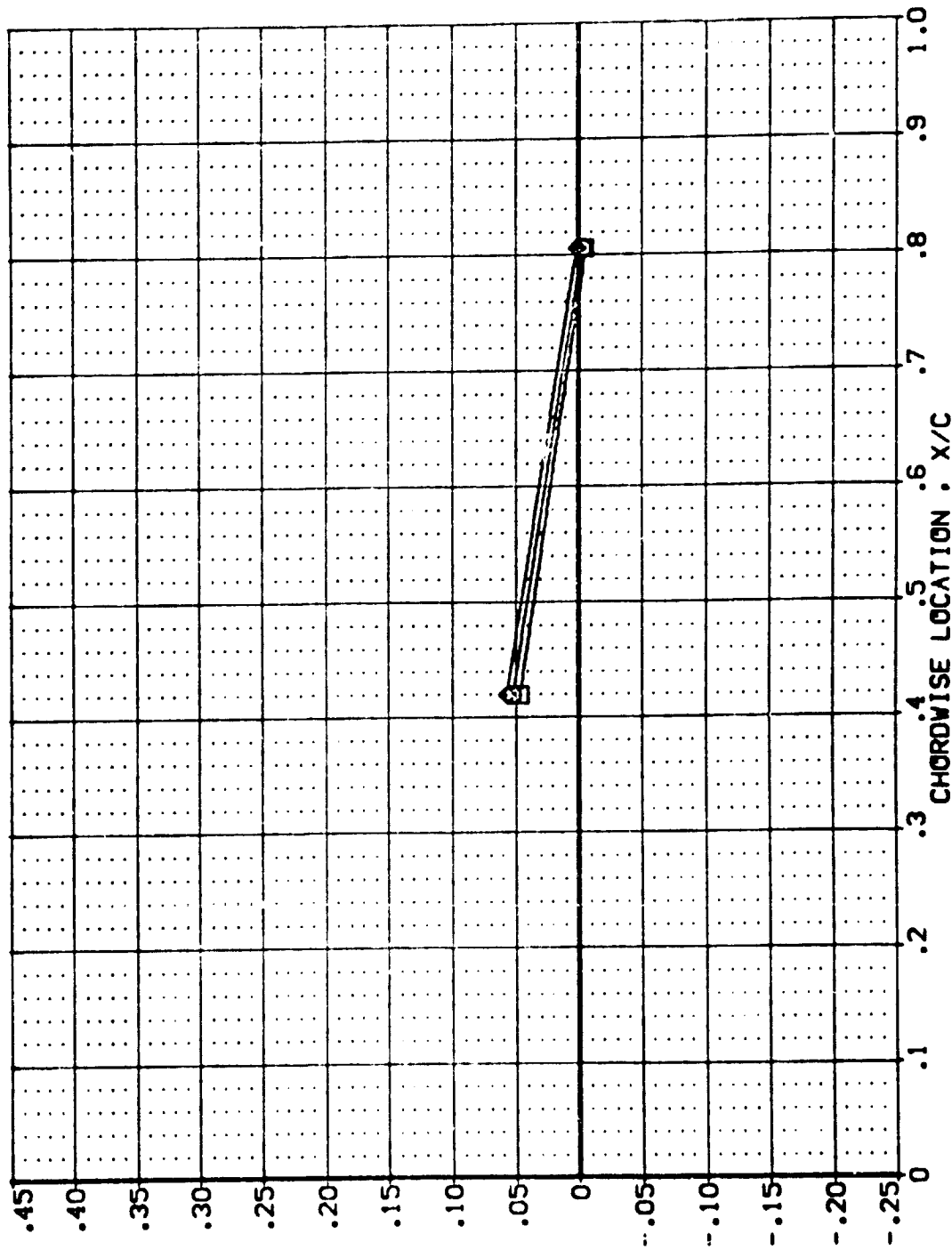
AVES 07-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 07-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 07-710 IAI2C 01 T1 S1 LOWER WING PRESSURE

POWER C/P

.000
.000
.000

SPWR

GIMBAL
4.000
1.000
3.000



PRESSURE COEFFICIENT • CP

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .427

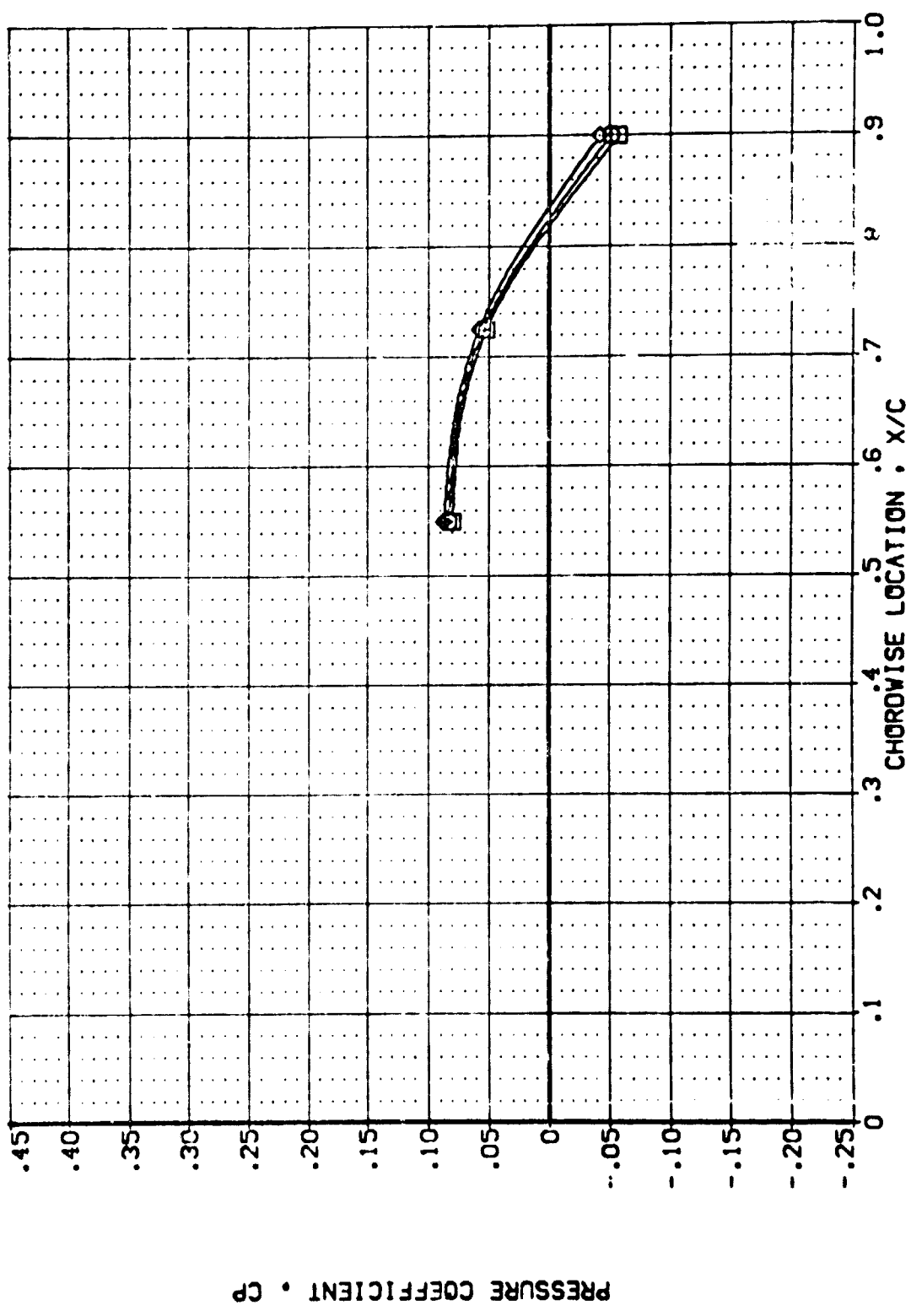
PAGE 488

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER QPR SQRPR GIMBAL

(LB210S) ARES 87-710 [A1ZC 01 T1 S1] LOWER WING PRESSURE .000 4.000

(LB204S) ARES 87-710 [A1ZC 01 T1 S1] LOWER WING PRESSURE .000 1.000

(LB208S) ARES 87-710 [A1ZC 01 T1 S1] LOWER WING PRESSURE .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH' = 3.500 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ106)
(LBZ046)
(LBZ088)

AVES 87-710
AVES 87-710
AVES 87-710

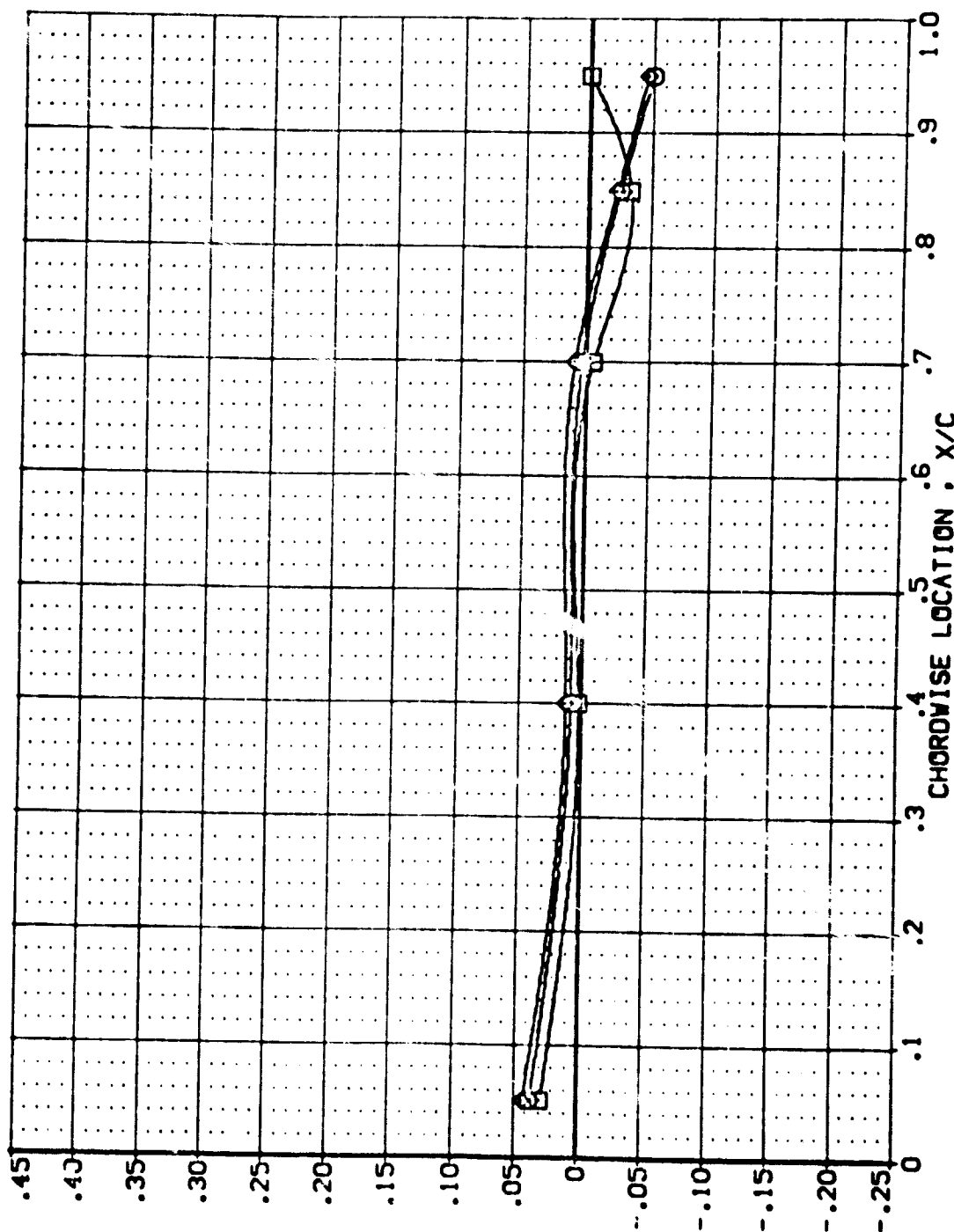
IA12C 01 T1 S1 LOWER WING PRESSURE
IA12C 01 T1 S1 LOWER WING PRESSURE
IA12C 01 T1 S1 LOWER WING PRESSURE

POWER 0.000
0.000
0.000

SP-PR

GIMBAL 4.000
1.000
3.000

PRESSURE COEFFICIENT • CP



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.5% ALPHA = -8.000 Y/B = .6/3

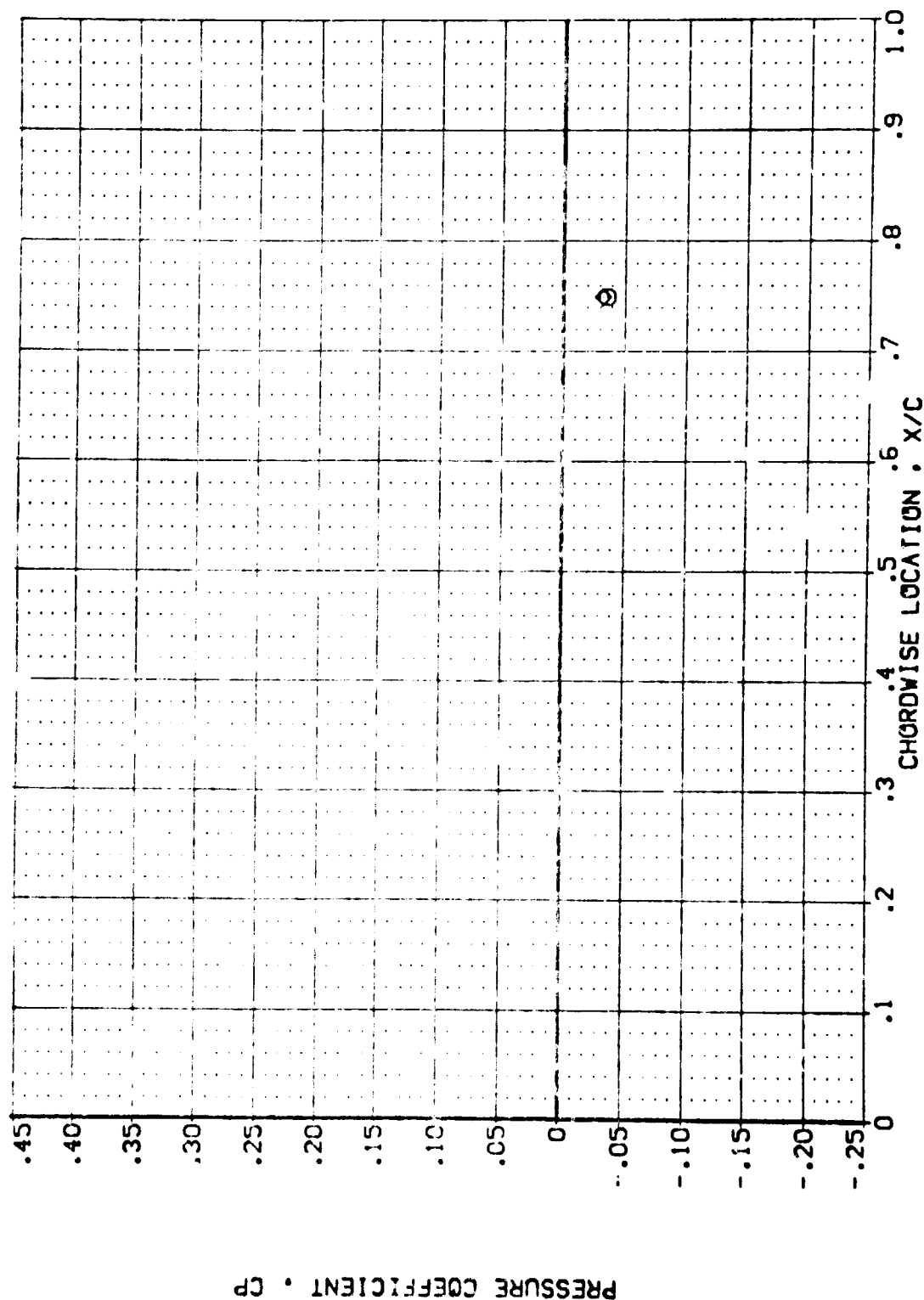
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ106)
(LBZ106)
(LBZ106)

AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER 0.00
0.00
0.00

GIMBAL 4.000
1.000
3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .780

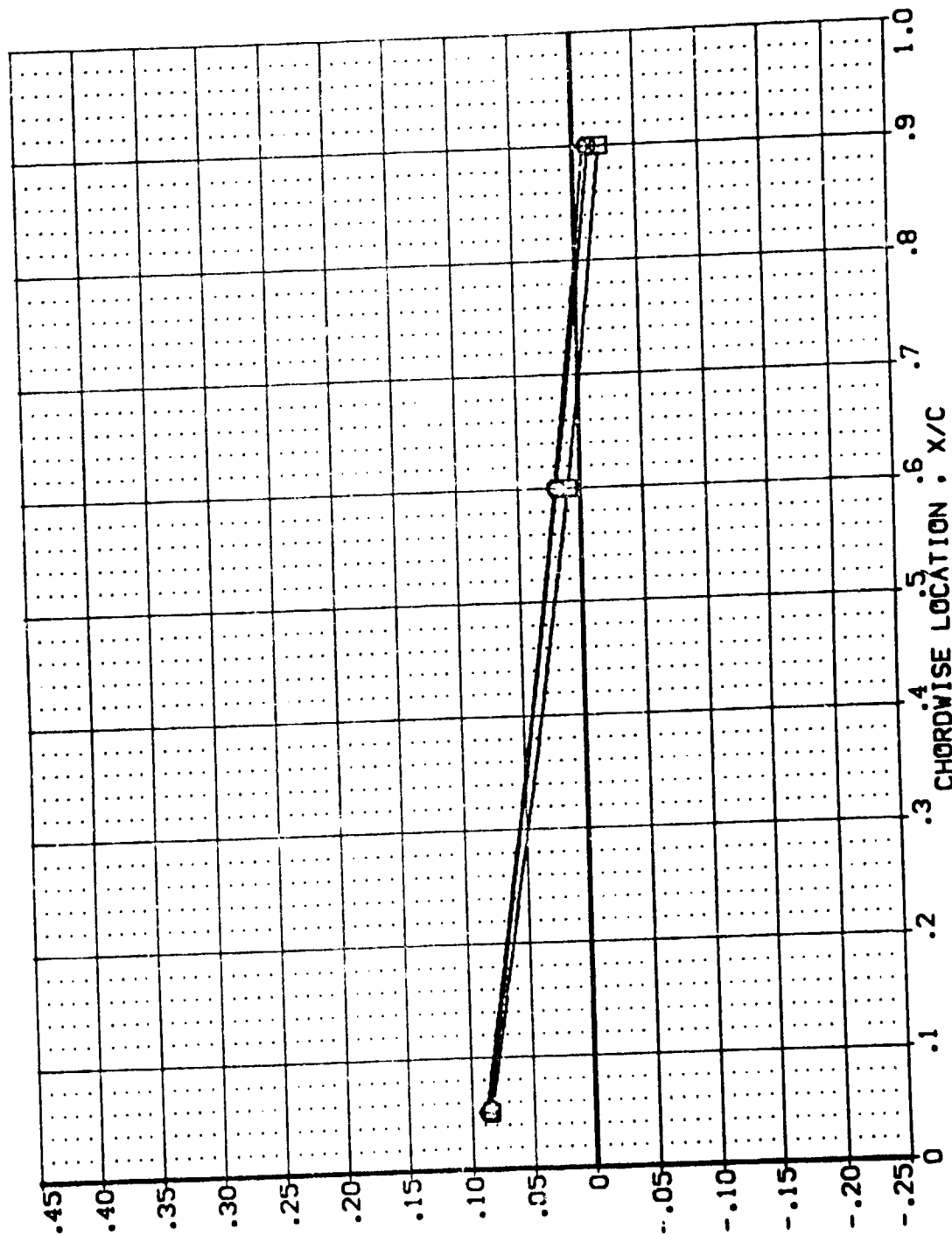
DATA SET SYMBOL
(LBZ106)
(LBZ046)
(LBZ088)

CONFIGURATION DESCRIPTION
AVES 87-710 IALZC 01 T1 S1
AVES 87-710 IALZC 01 T1 S1
AVES 87-710 IALZC 01 T1 S1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER GPR SDPR GIMBAL
.000 4.000
.000 1.000
.000 3.000

PRESSURE COEFFICIENT • CP



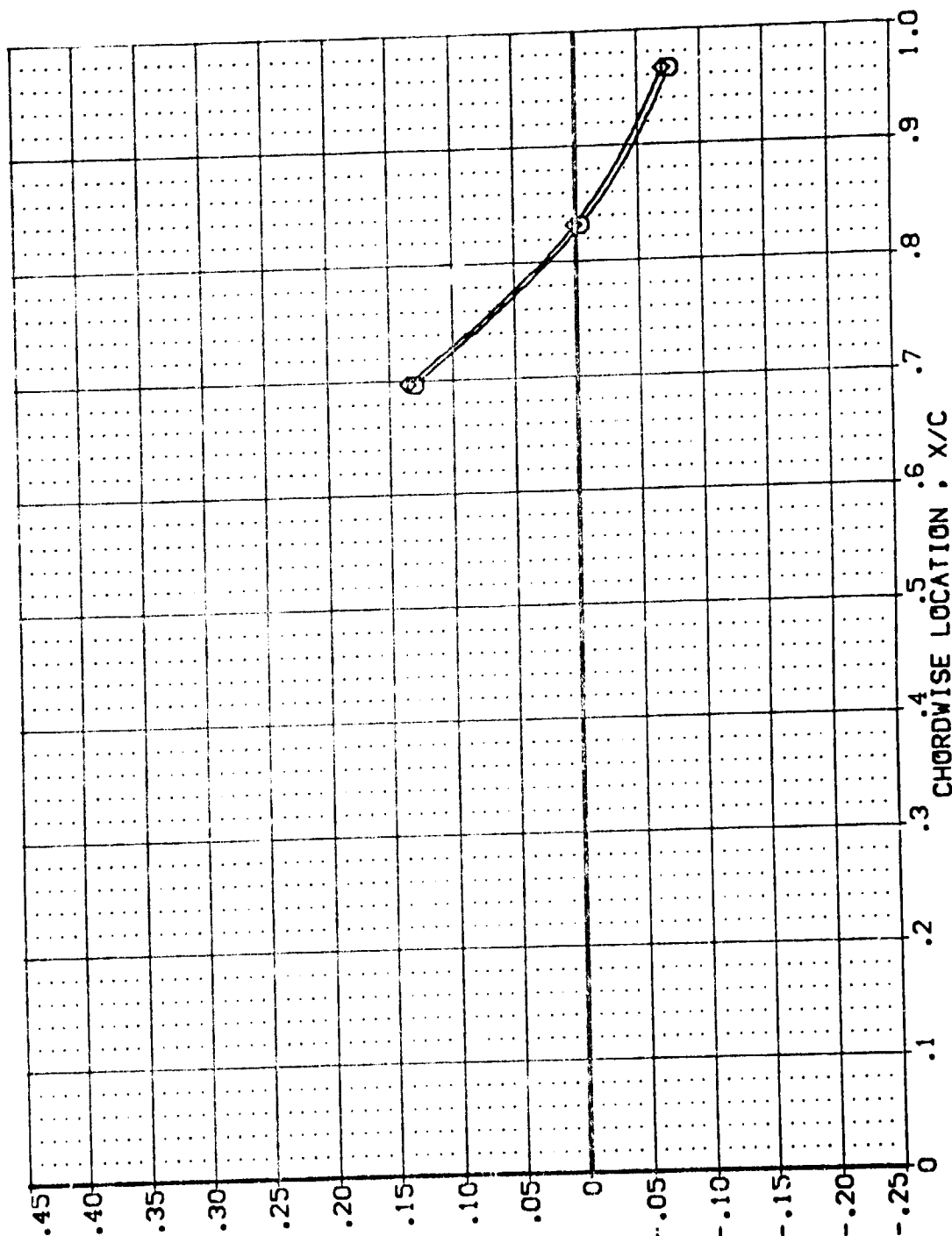
POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZ105) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ045) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ069) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER COR SR-PR GIMBAL
 .000
 .000
 .000
 4.000
 1.000
 3.000

PRESSURE COEFFICIENT • CP



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM
 MACH = 3.500 ALPHA = .000 Y/B = .299
 PAGE 493

DATA SET SYMBOL

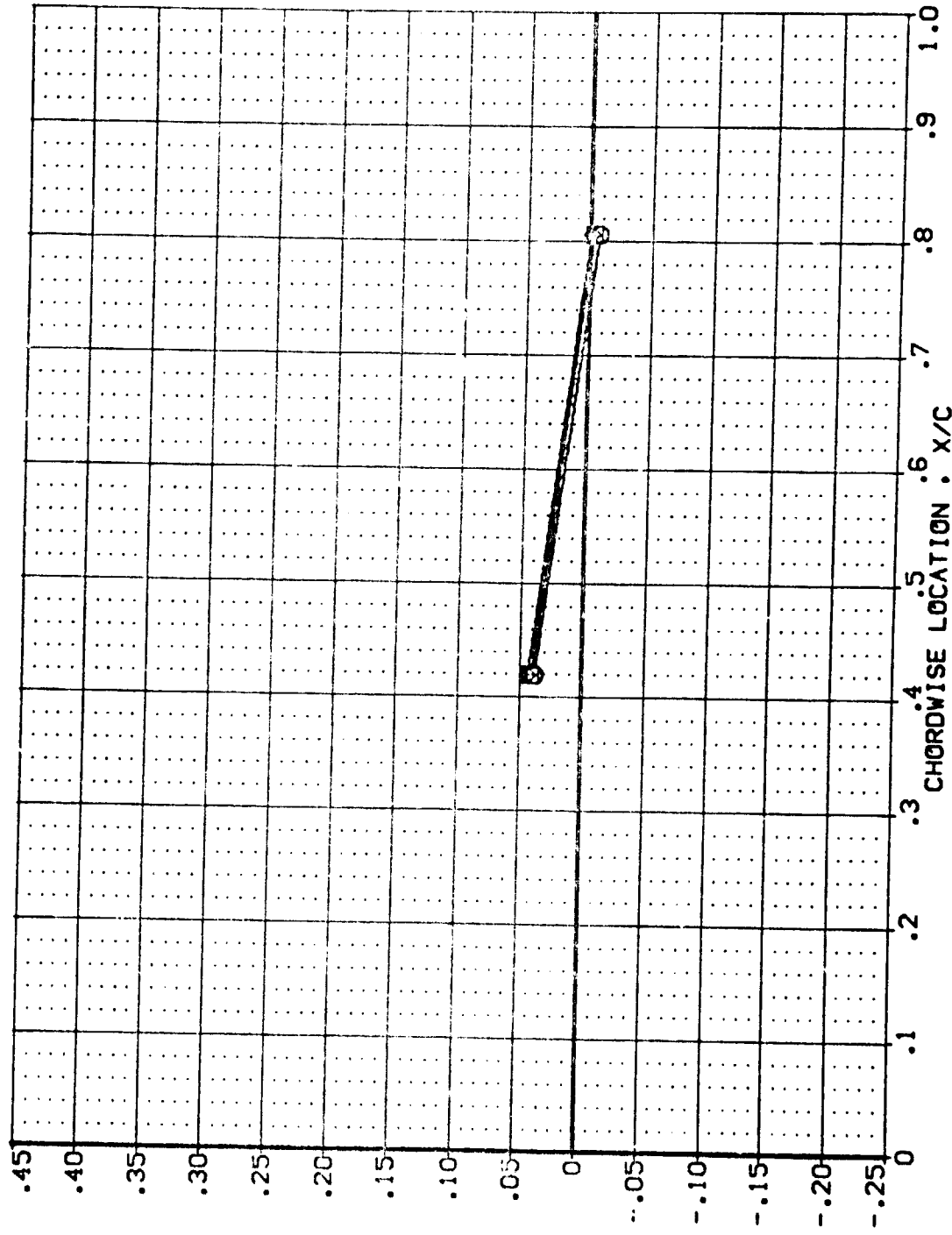
(LB2106)
(LB2046)
(LB2089)



CONFIGURATION DESCRIPTION

AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE

POWER C/R SP/R GIMBAL
.000
.000
4.000
1.000
3.000



PRESSURE COEFFICIENT • CP

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

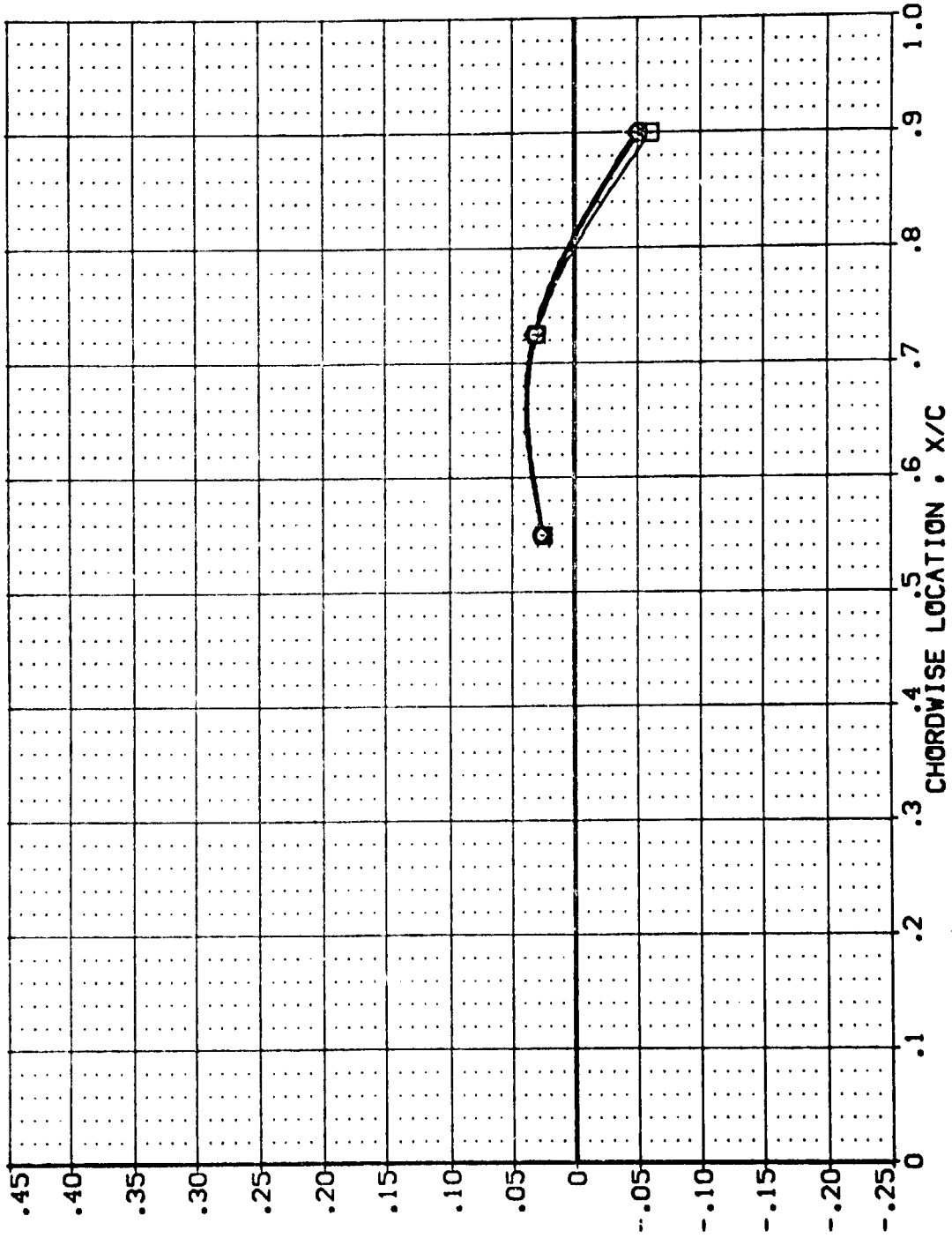
(LB2106)
(LB2046)
(LB2069)

AMES 87-710
AMES 87-710
AMES 87-710

1A12C 01 T1 S1
1A12C 01 T1 S1
1A12C 01 T1 S1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER GPR STARR GIMBAL
.000
.000
3.000



PRESSURE COEFFICIENT, CP

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

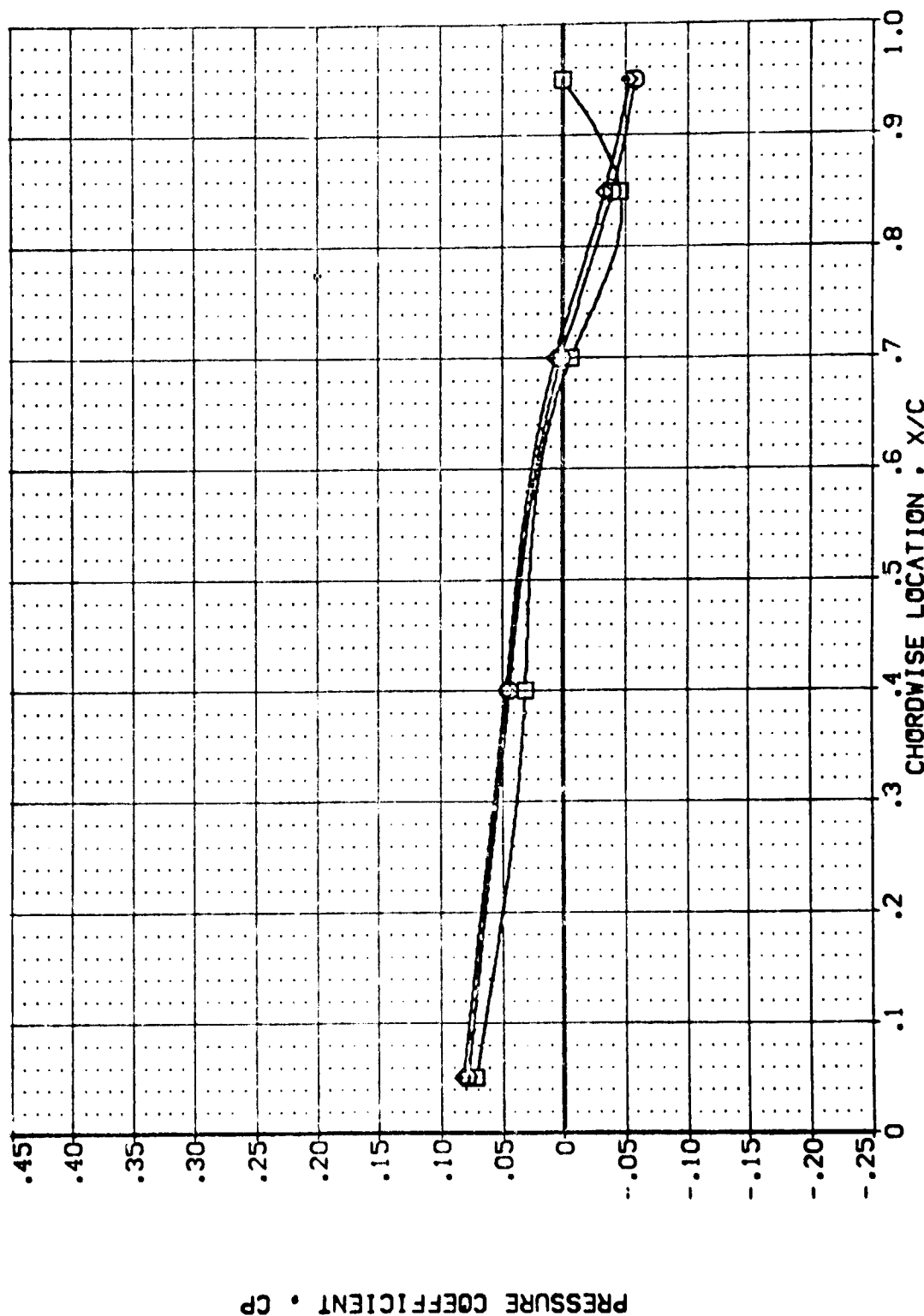
MACH = 3.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SRRPR GIMBAL

(LBZ106) ASES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE .000 .000 4.000

(LBZ045) ASES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE .000 .000 1.000

(LBZ068) ASES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE .000 .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

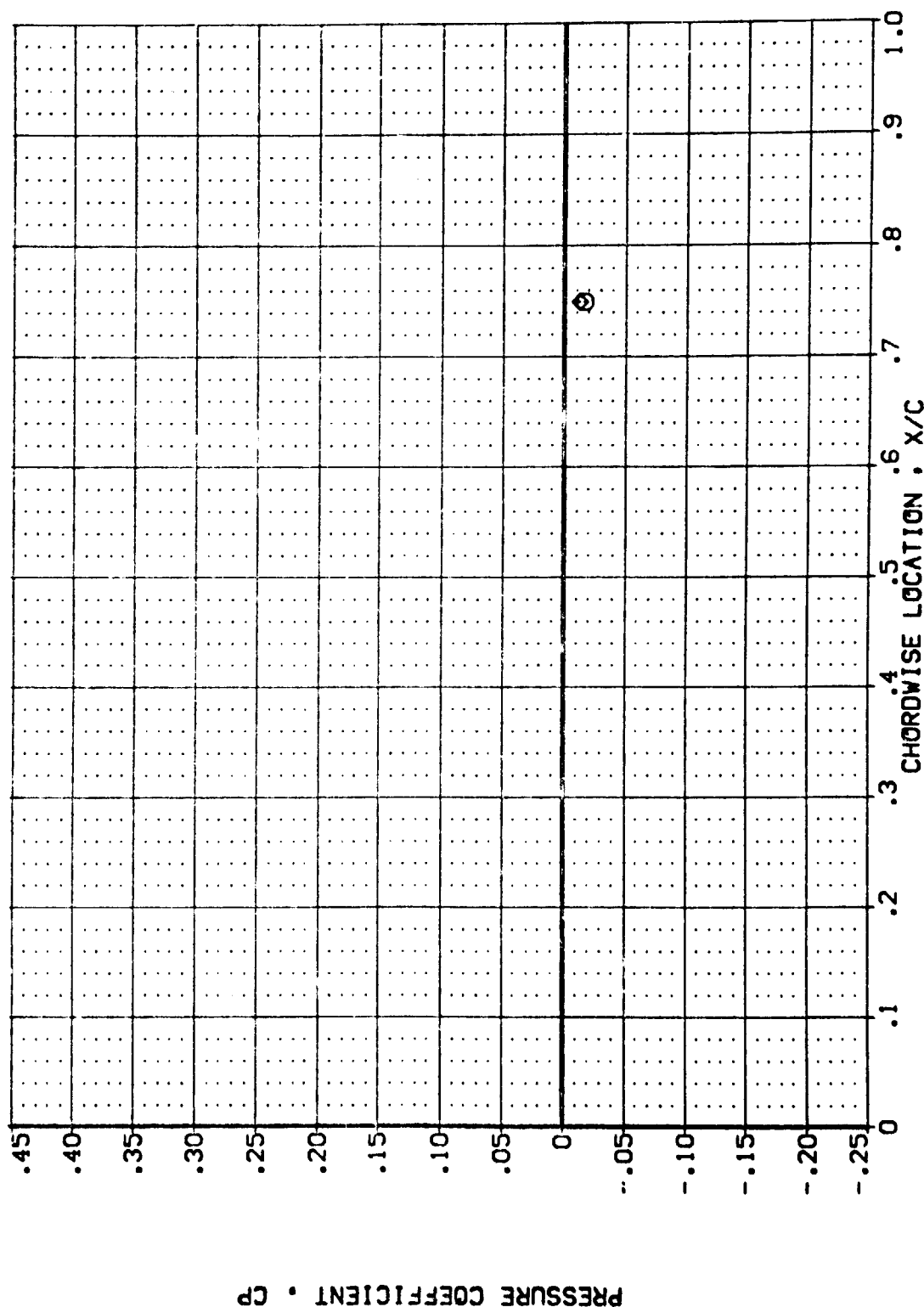
MACH = 3.500 ALPHA = .000 Y/B = .673 PAGE 496

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ106)
(LBZ046)
(LBZ089)

AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE

POWER DFR SFR GIMBAL
.000
.000
.000
4.000
1.000
3.000



PRESSURE COEFFICIENT, CP

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .780

DATA SET SYMBOL
(LBZ106)
(LBZ045)
(LBZ089)

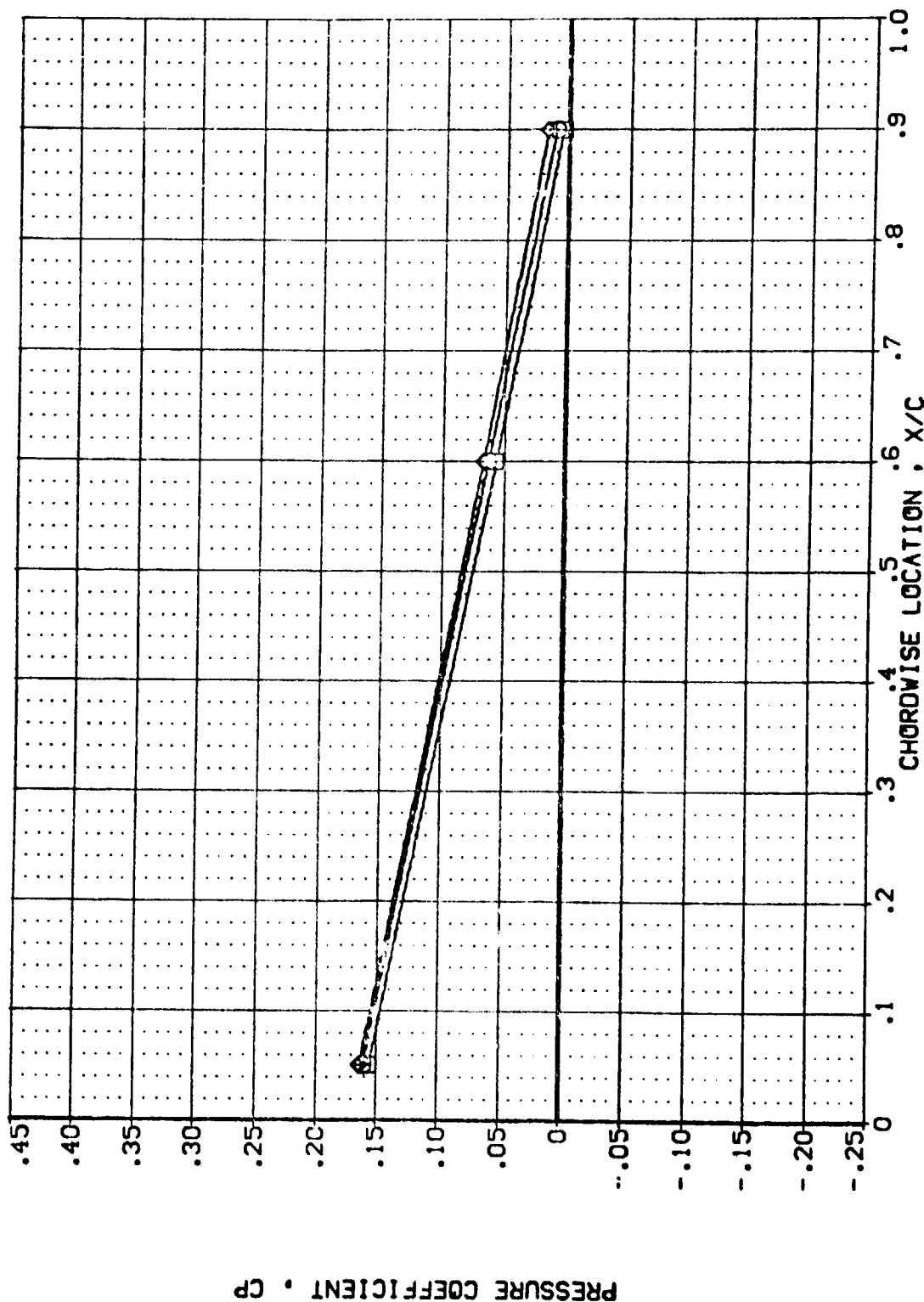
CONFIGURATION DESCRIPTION
A-ES 87-710 IA12C 01 T1 S1
A-ES 87-710 IA12C 01 T1 S1
A-ES 87-710 IA12C 01 T1 S1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER 0.000
0.000
0.000

SDPR
SDPR
SDPR

GIMBAL
4.000
1.000
3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM
MACH = 3.500 ALPHA = .000 Y/B = .887
PAGE 498

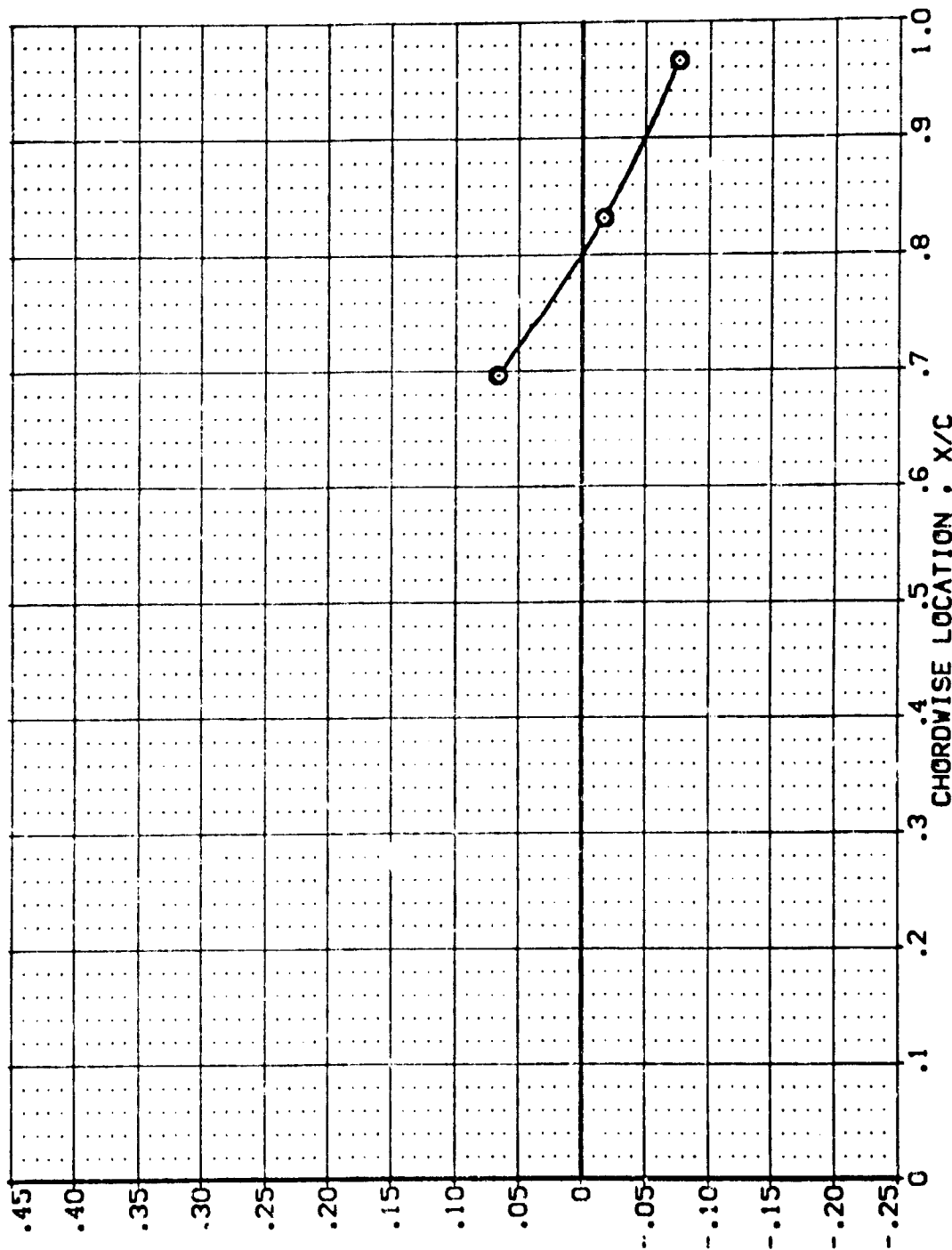
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ106)
(LBZ046)
(LBZ086)

AVES 87-710
AVES 87-710
AVES 87-710

IA12C DI T1 SI LOWER WING PRESSURE
IA12C DI T1 SI LOWER WING PRESSURE
IA12C DI T1 SI LOWER WING PRESSURE

POWER .000
OPR .000
SPRFR 4.000
GIMBAL 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL

(LBZ106)
(LBZ046)
(LBZ088)

AVES 87-710
AVES 87-710
AVES 87-710

CONFIGURATION DESCRIPTION

IA12C 01 T1 S1 LOWER WING PRESSURE
IA12C 01 T1 S1 LOWER WING PRESSURE
IA12C 01 T1 S1 LOWER WING PRESSURE

POWER

.000
.000
.000

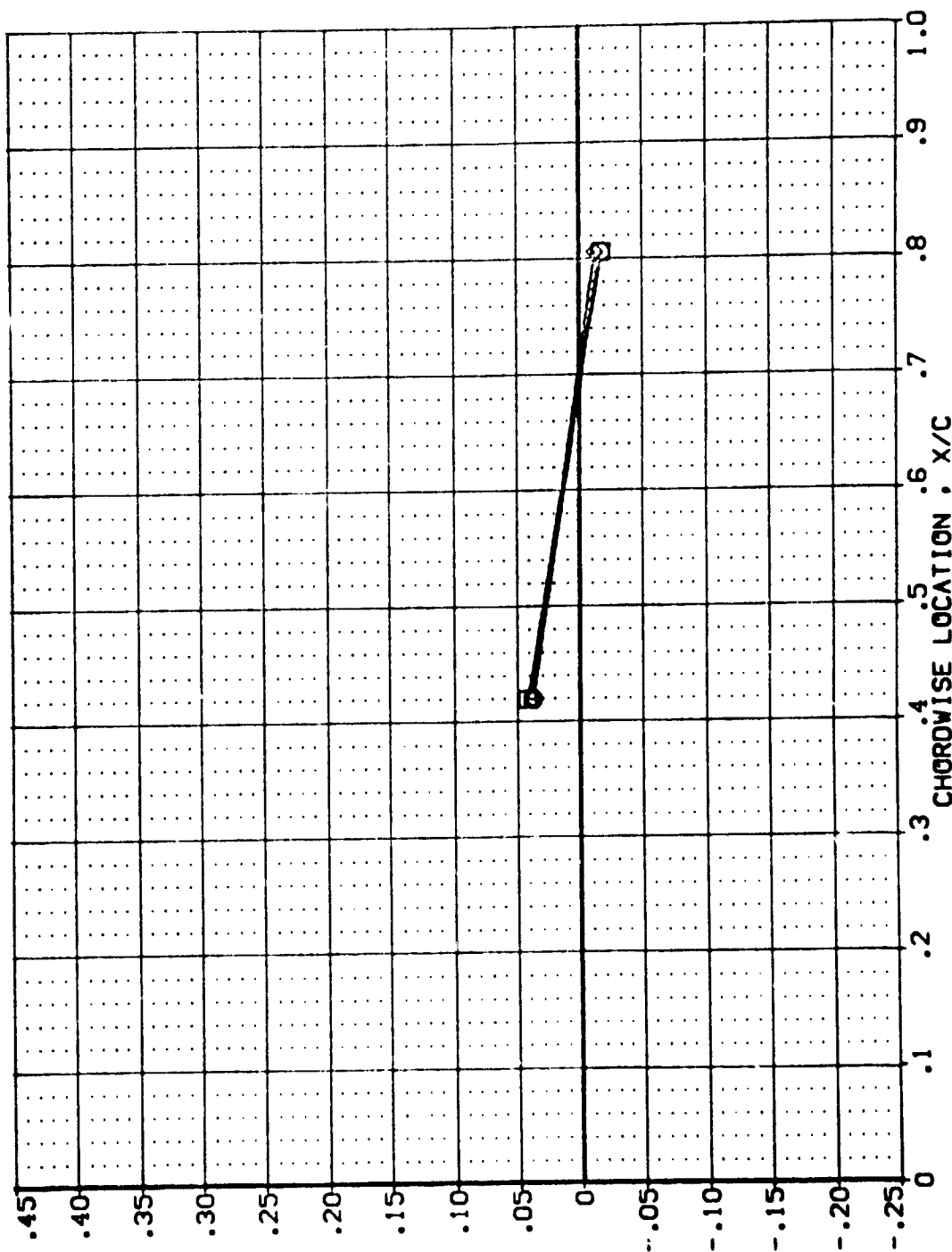
CFR

SR-PR

GIMBAL

4.000
1.000
3.000

PRESSURE COEFFICIENT • CP



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .427

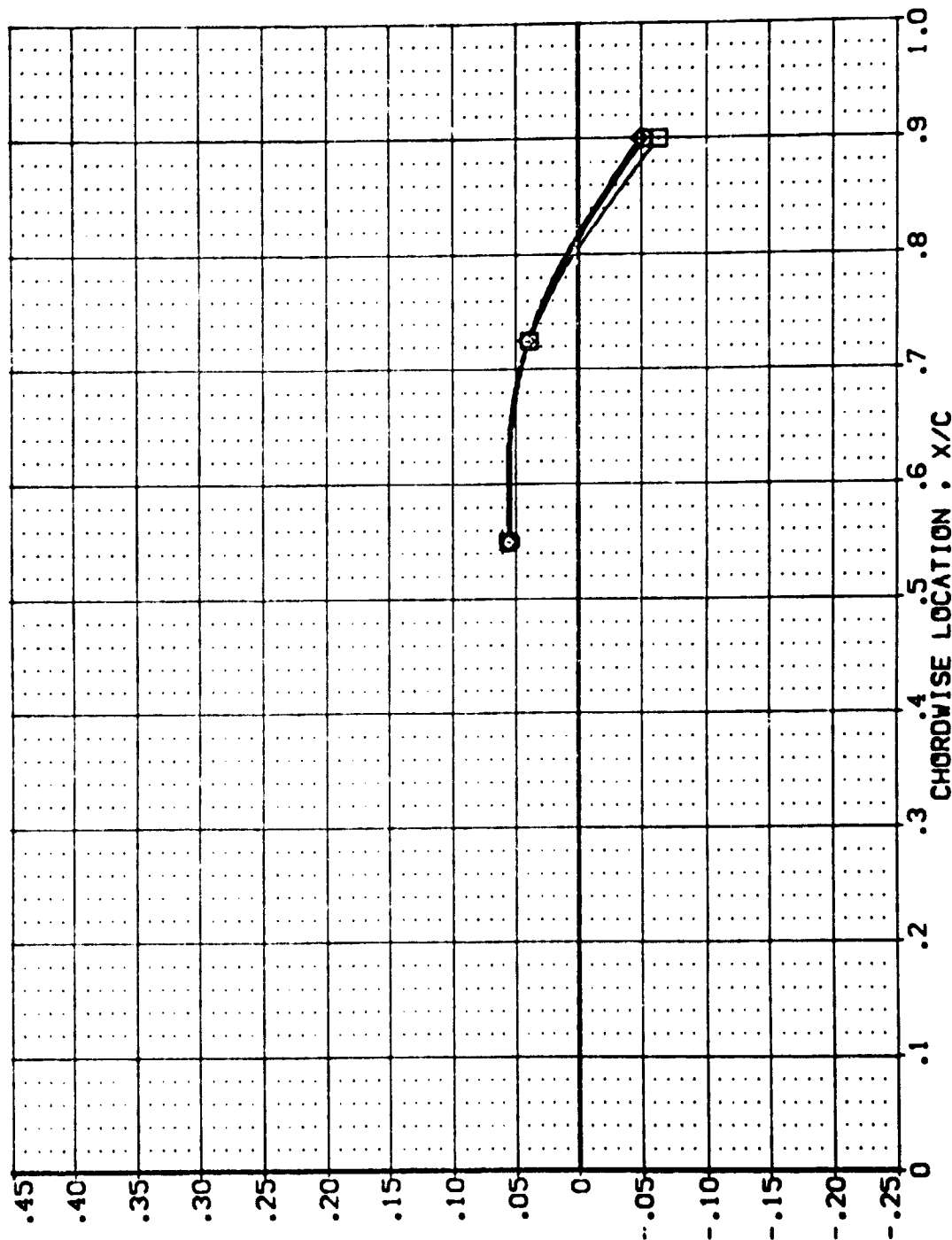
PAGE 500

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER QPR SFRP GIMBAL

(LB2106) AVE8 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 .000 4.000

(LB2106) AVE8 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 .000 1.000

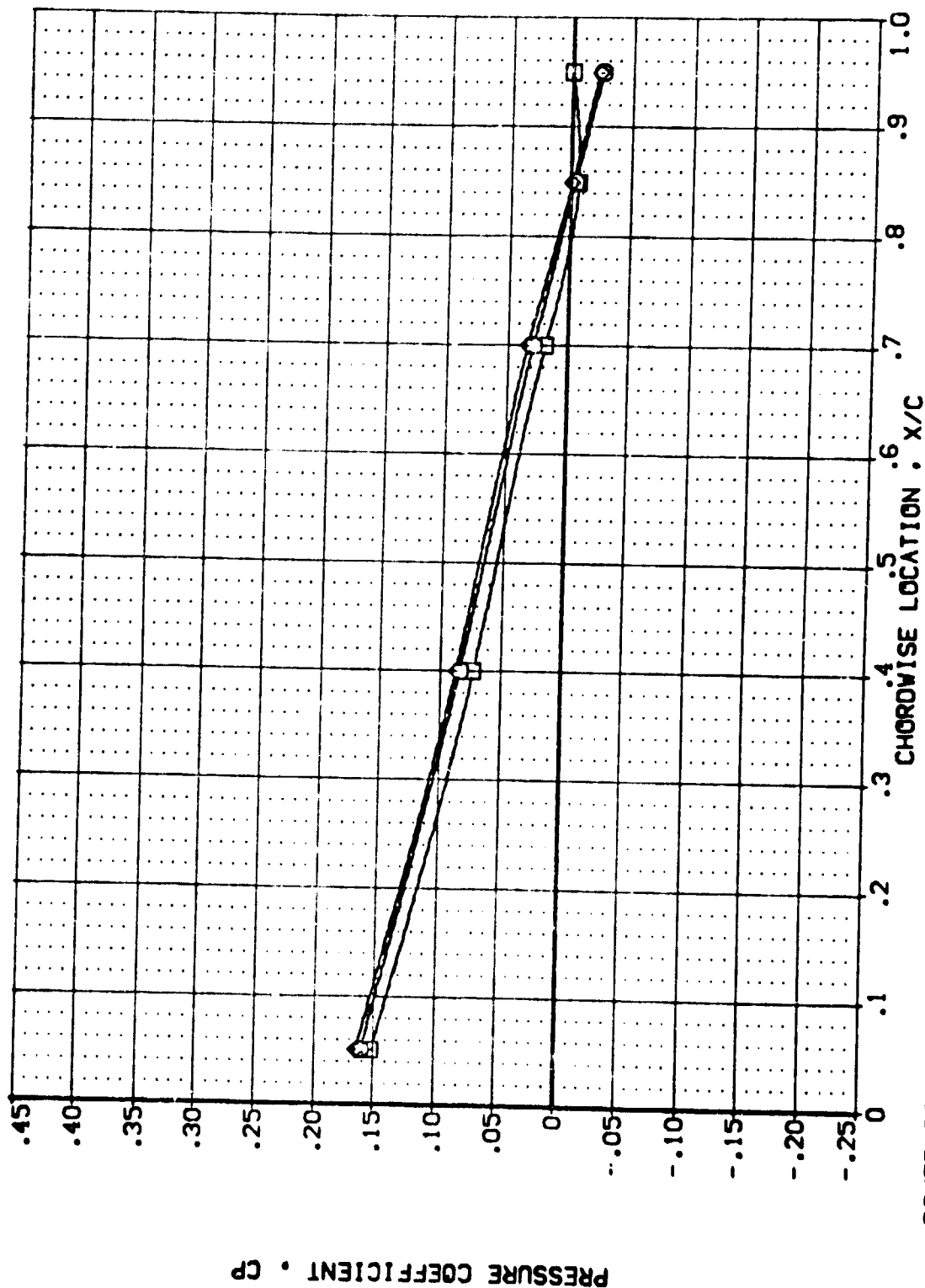
(LB2106) AVE8 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 .000 3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .534 PAGE 501

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	QPR	SWPR	GIMBAL
(LBZ106)	AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	.000			4.000
(LBZ046)	AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LBZ088)	AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	.000			3.000



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .673

PAGE 502

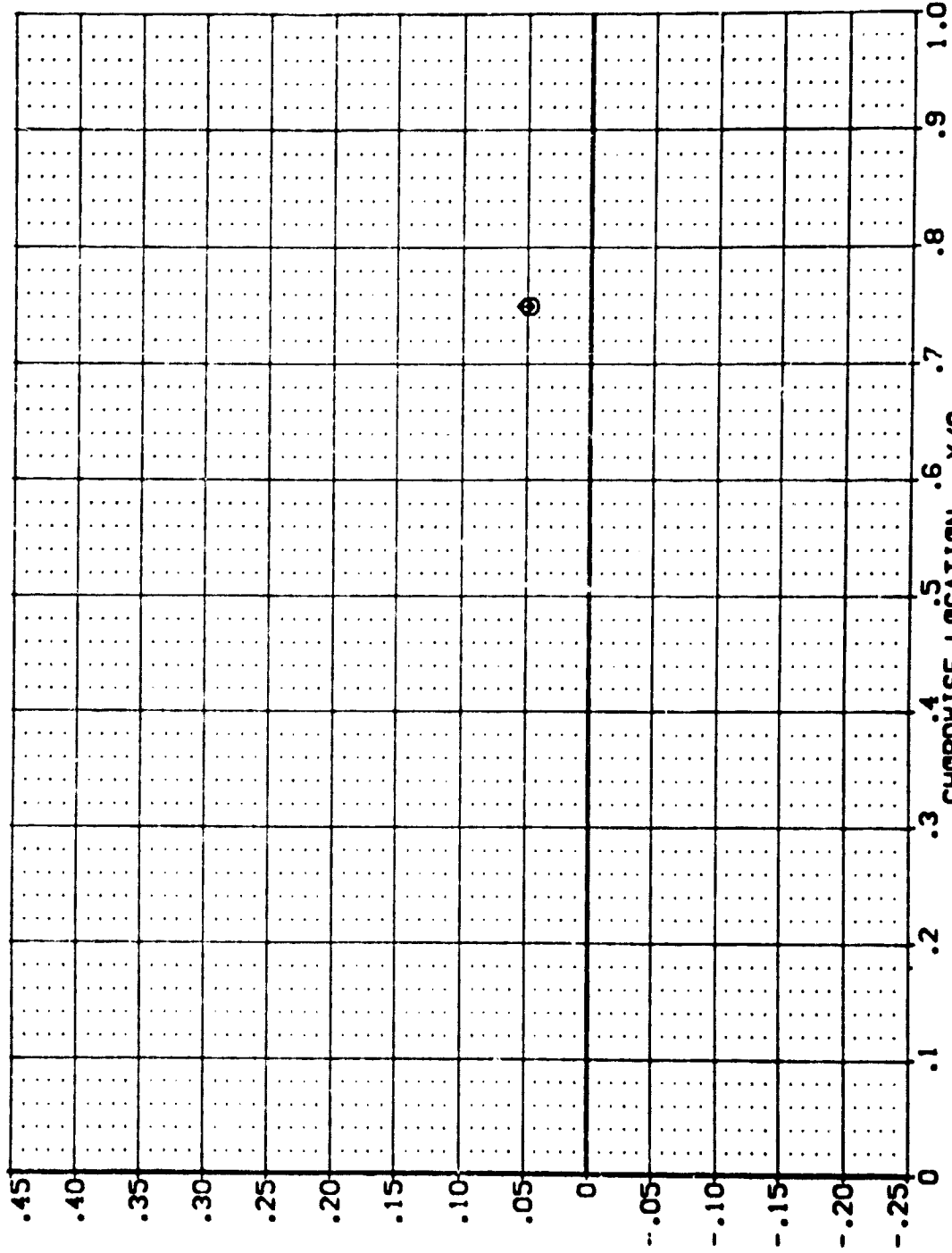
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ106)
(LBZ046)
(LBZ088)

AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER GPR SPPR GIMBAL
.000
.000
1.000
3.000

PRESSURE COEFFICIENT - CP



POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .780

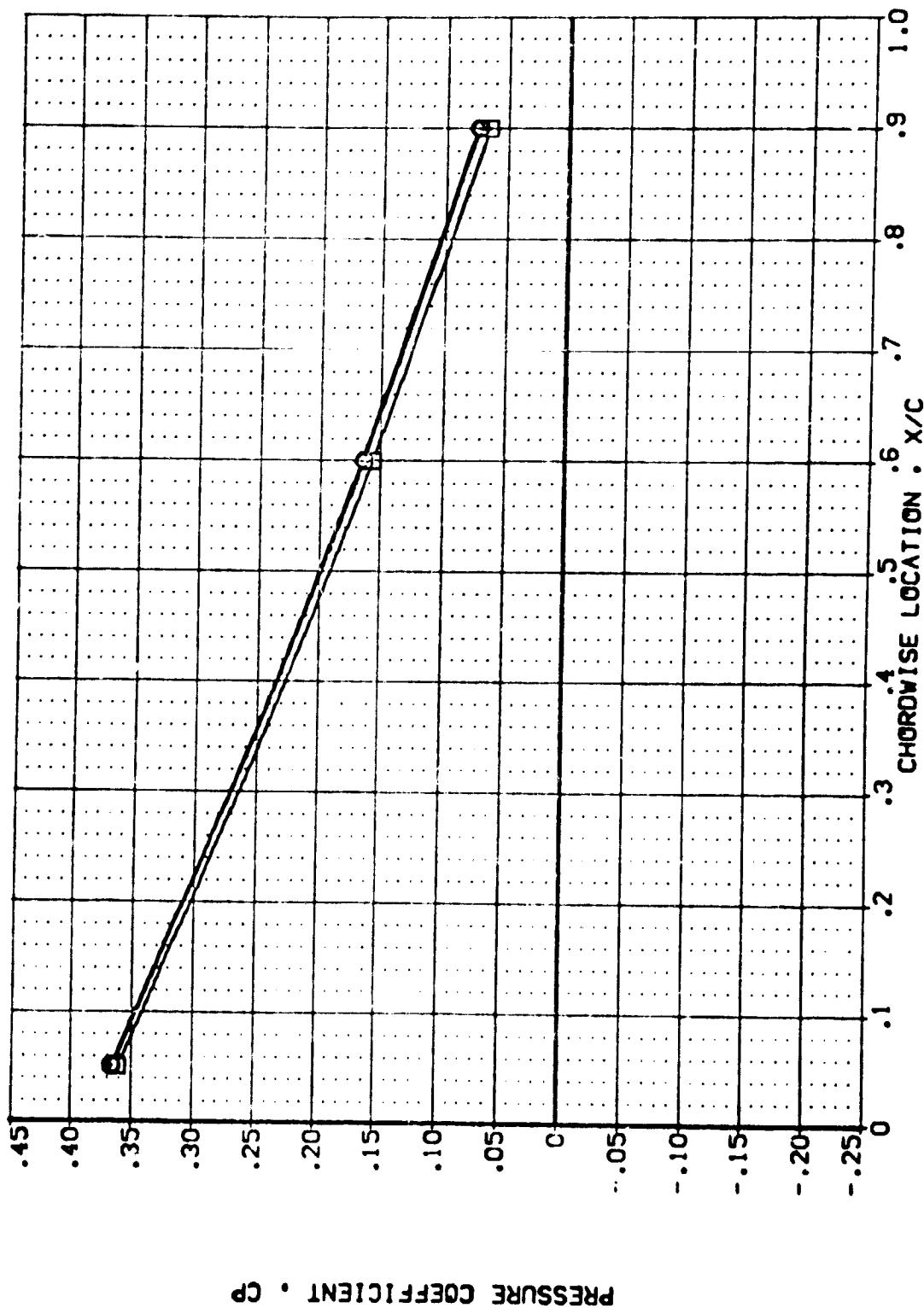
DATA SET SYMBOL
 (LBZ106)
 (LBZ046)
 (LBZ088)

CONFIGURATION DESCRIPTION
 AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE

POWER C/P
 .000
 .000
 .000

SEWER

GIMBAL
 4.000
 1.000
 3.000



PRESSURE COEFFICIENT, CP

POWER-OFF NOZZLE GIMBAL ANGLE EFFECTS ON WING PRESSURE DISTRIBUTION -WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL

(UBZ008)
(UBZ041)
(UBZ103)

CONFIGURATION DESCRIPTION

AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 01 T1 S3 UPPER WING PRESSURE

POWER

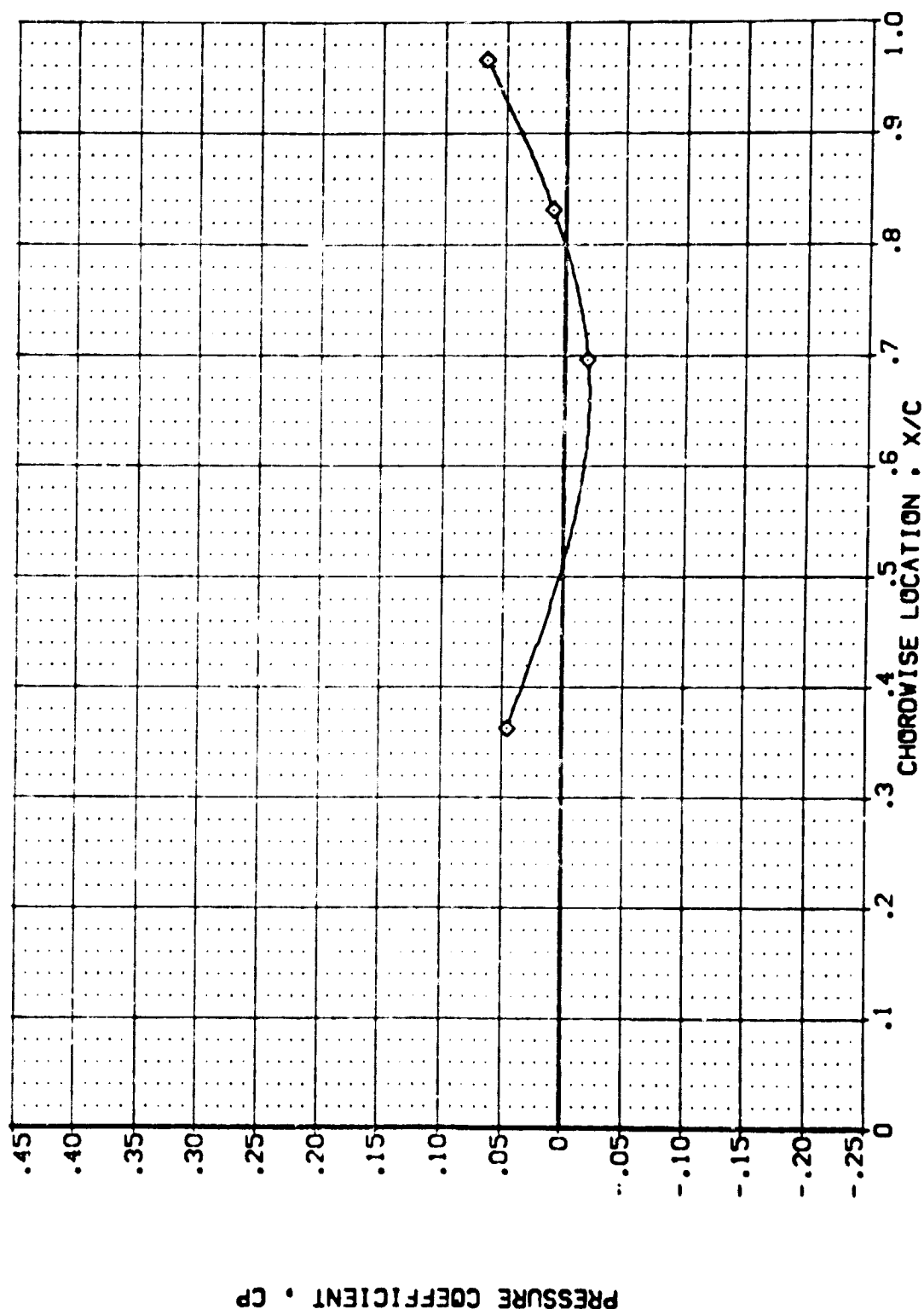
.000 26.860
1.000 26.860

SRPR

.768
.768

61MBAL

1.000
1.000
1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

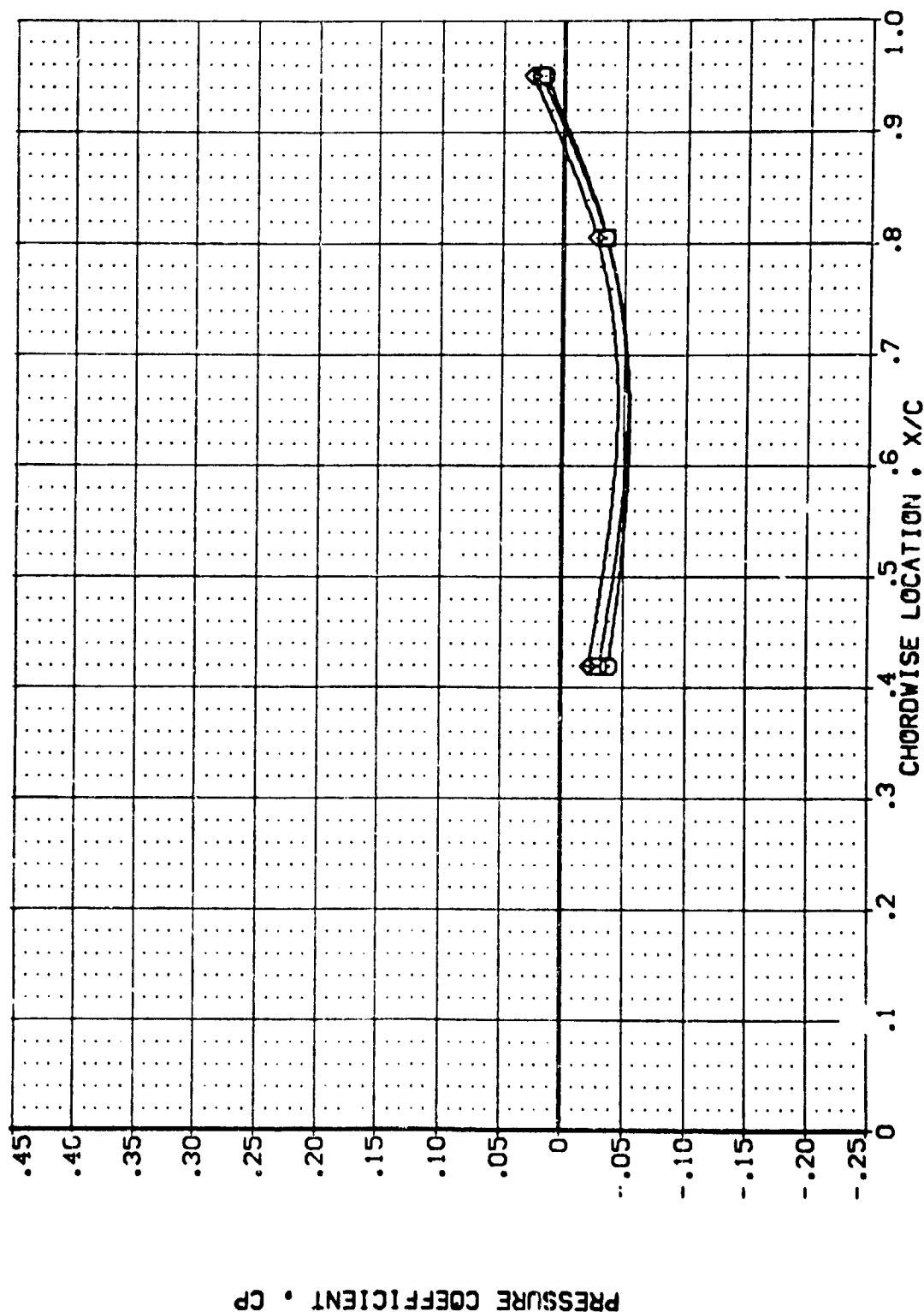
MACH = 3.000 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL

(LBZD08)
(LBZD09)
(LBZD10)
(LBZD11)
(LBZD12)

CONFIGURATION DESCRIPTION
AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE
AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE
AVES 87-710 [A12C 01 T1 S3] UPPER WING PRESSURE

POWER DBR SWPR GIMBAL
.000 26.860 1.000
1.000 26.860 .768
1.000 26.860 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

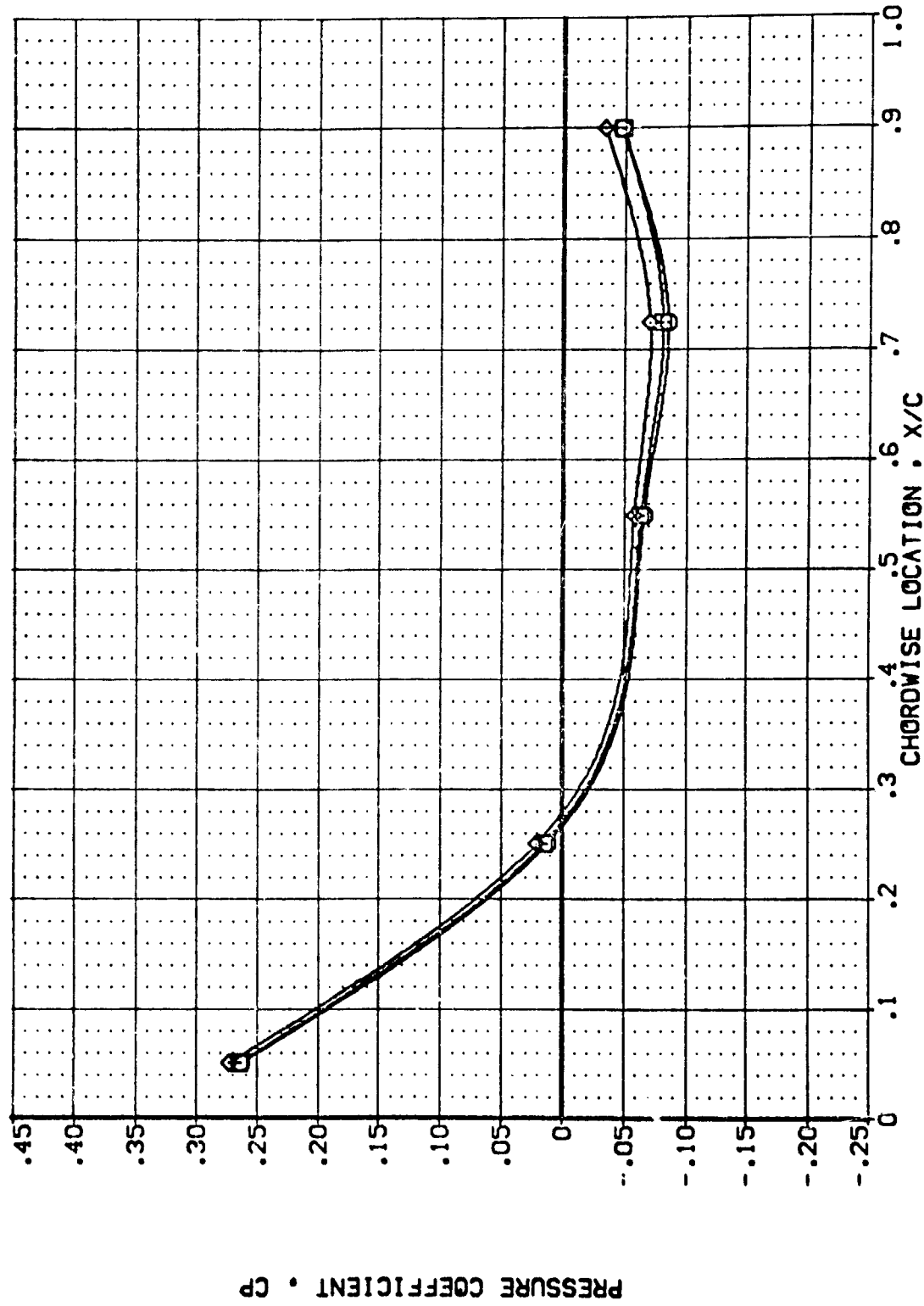
MACH = 3.000 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ038)
(LBZ041)
(LBZ119)

AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S3 UPPER WING PRESSURE

POWER CDR SPRR GINBAL
.000
1.000
1.000
26.860
26.860
1.000
1.000
1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL

(UBZ008)
(UBZ041)
(UBZ109)

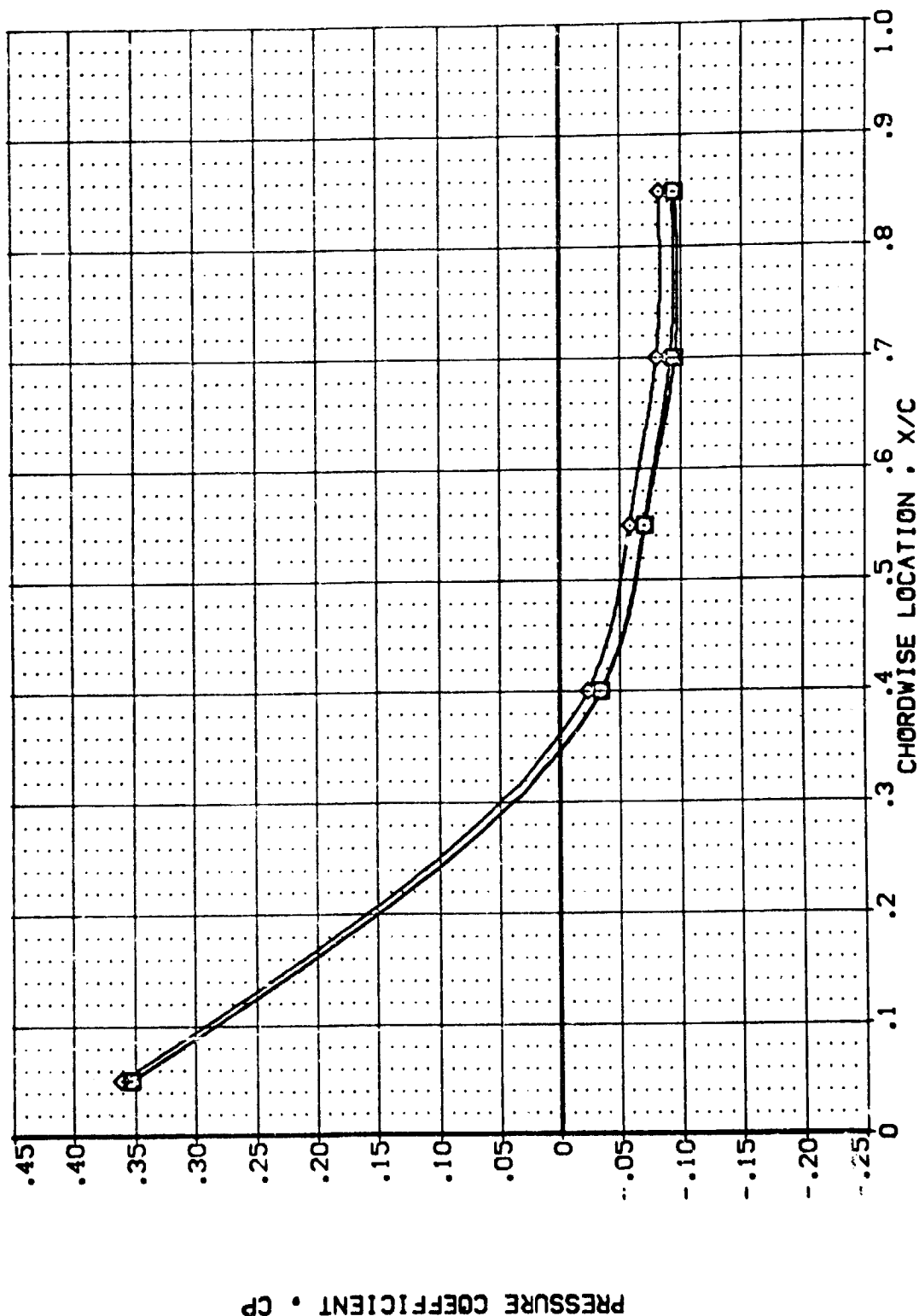


CONFIGURATION DESCRIPTION

AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S3 UPPER WING PRESSURE

POWER DFR SDFR GIMBAL

.000 26.860 1.000
1.000 26.860 .758
1.000 .758 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ008)
(UBZ041)
(UBZ109)

AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S3

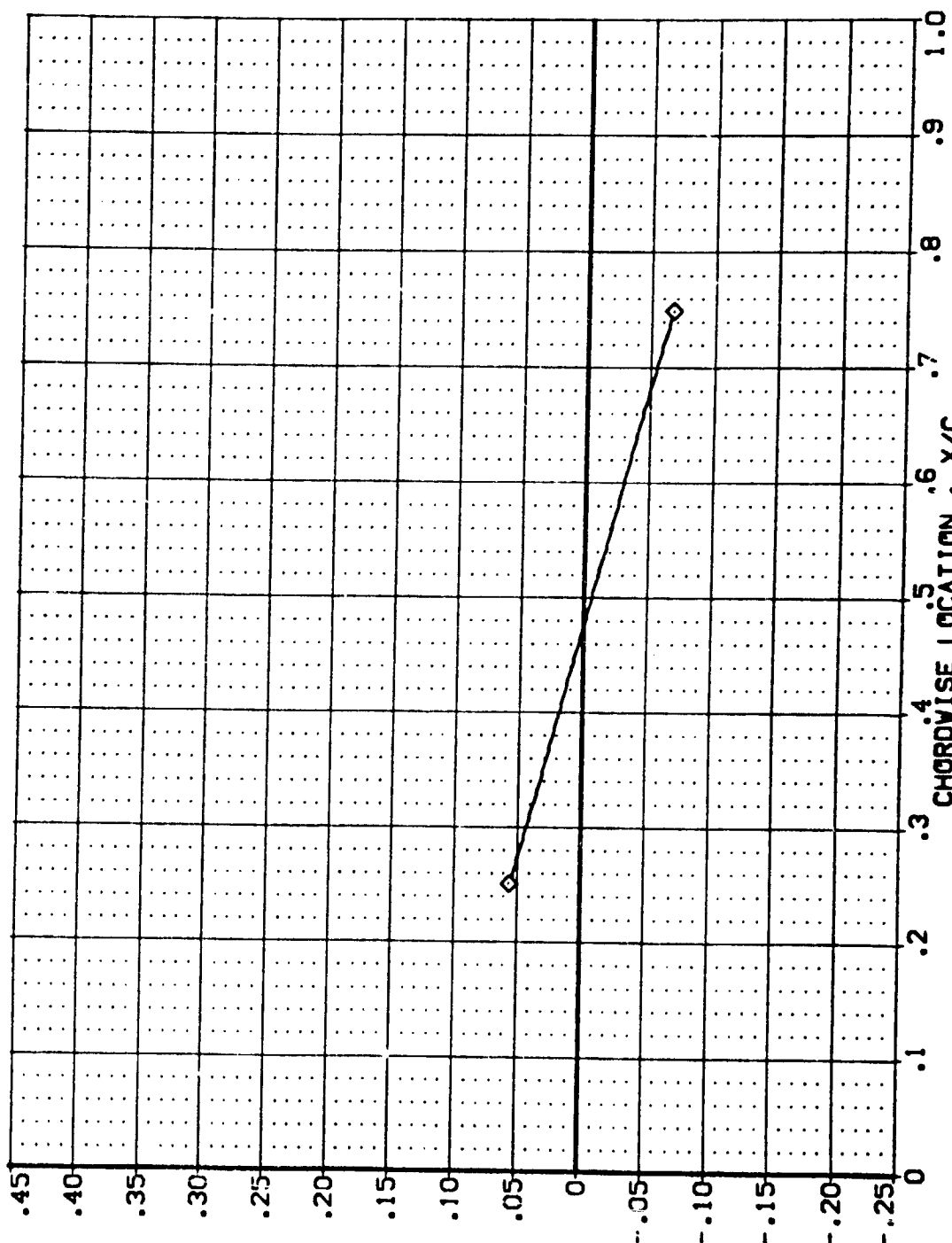
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER 0.000
POWER 1.000
POWER 1.000

DPR 26.860
DPR 26.860
DPR 26.860

SRPR .768
SRPR .768
SRPR .768

GIMBAL 1.000
GIMBAL 1.000
GIMBAL 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

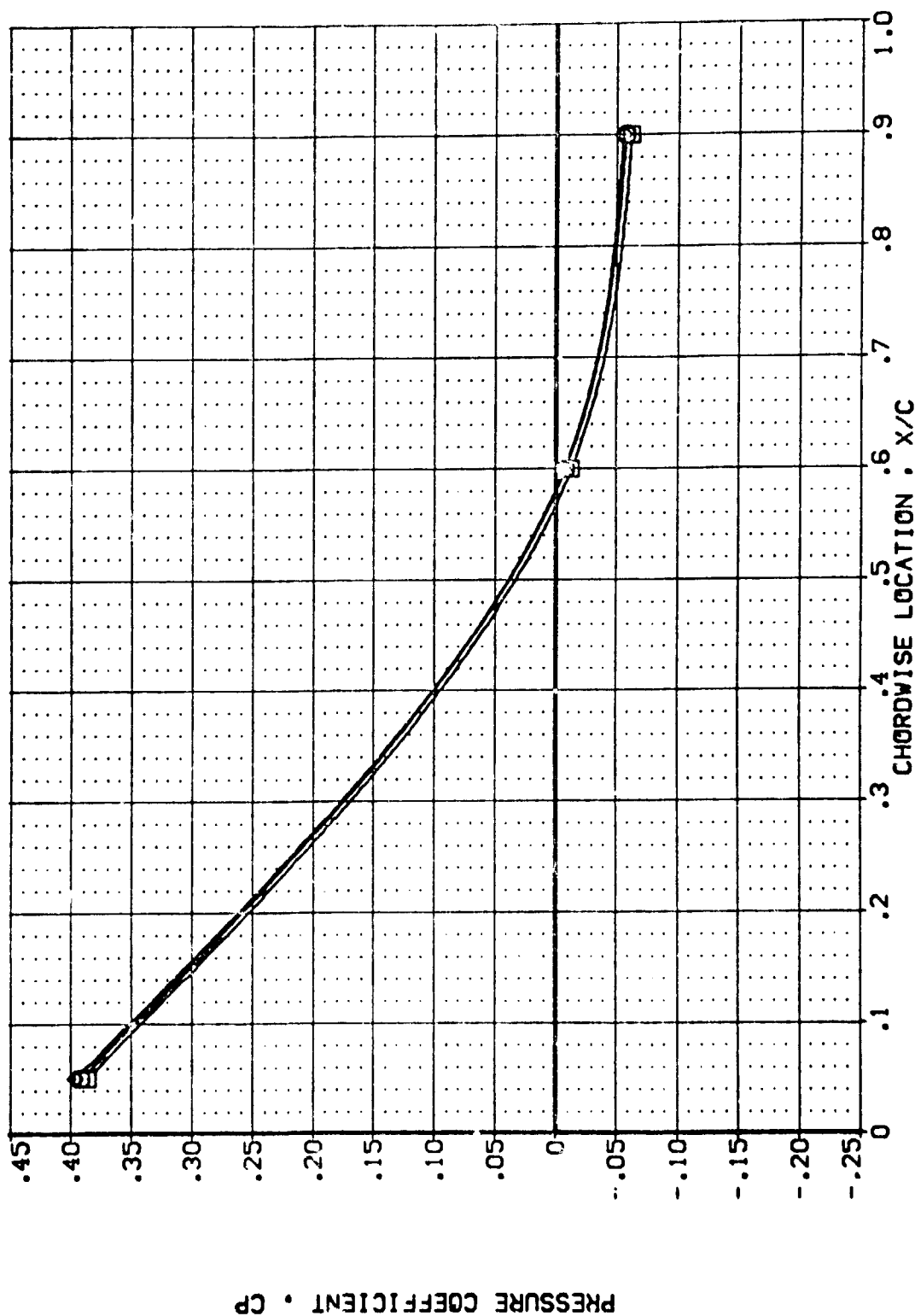
MACH = 3.000 ALPHA = -8.000 Y/B = .780

DATA SET SYMBOL: (UBZ038) (UBZ041) (UBZ109)

CONFIGURATION DESCRIPTION: AVES 87-710 | A1ZC 01 T1 S1 | UPPER WING PRESSURE
 AVES 87-710 | A1ZC 01 T1 S1 | UPPER WING PRESSURE
 AVES 87-710 | A1ZC 01 T1 S3 | UPPER WING PRESSURE

POWER: .000 26.860 .768
 1.000 26.860 .768

GIMBAL: 1.000 1.000 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .887

PAGE 510

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2039)
(UB2041)
(UB2109)

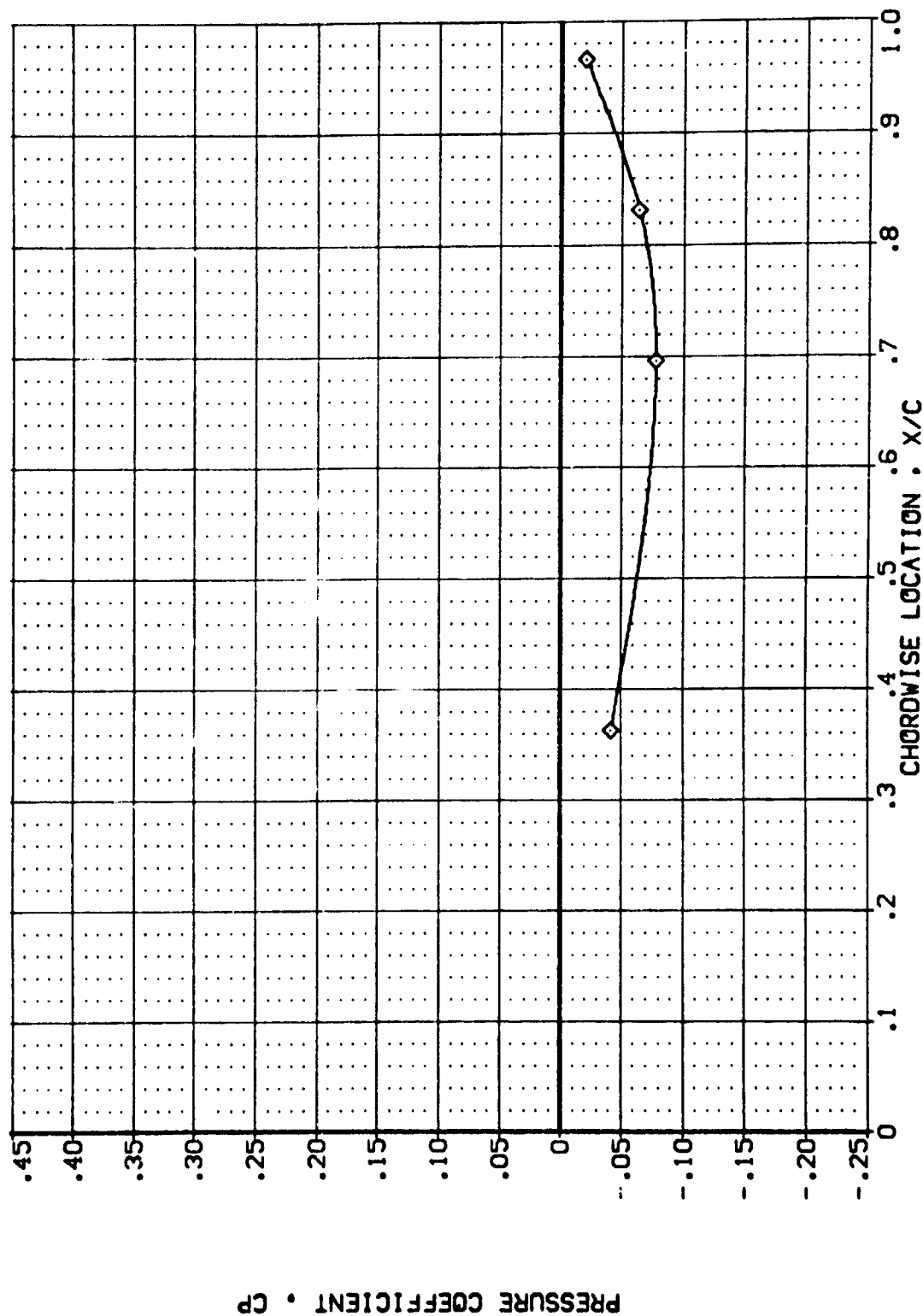
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S3 UPPER WING PRESSURE

POWER 0.000
1.000
1.000
1.000

OPR 26.860
26.860

SRPR .768
.768

GIMBAL 1.000
1.000
1.000



PRESSURE COEFFICIENT • CP

SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

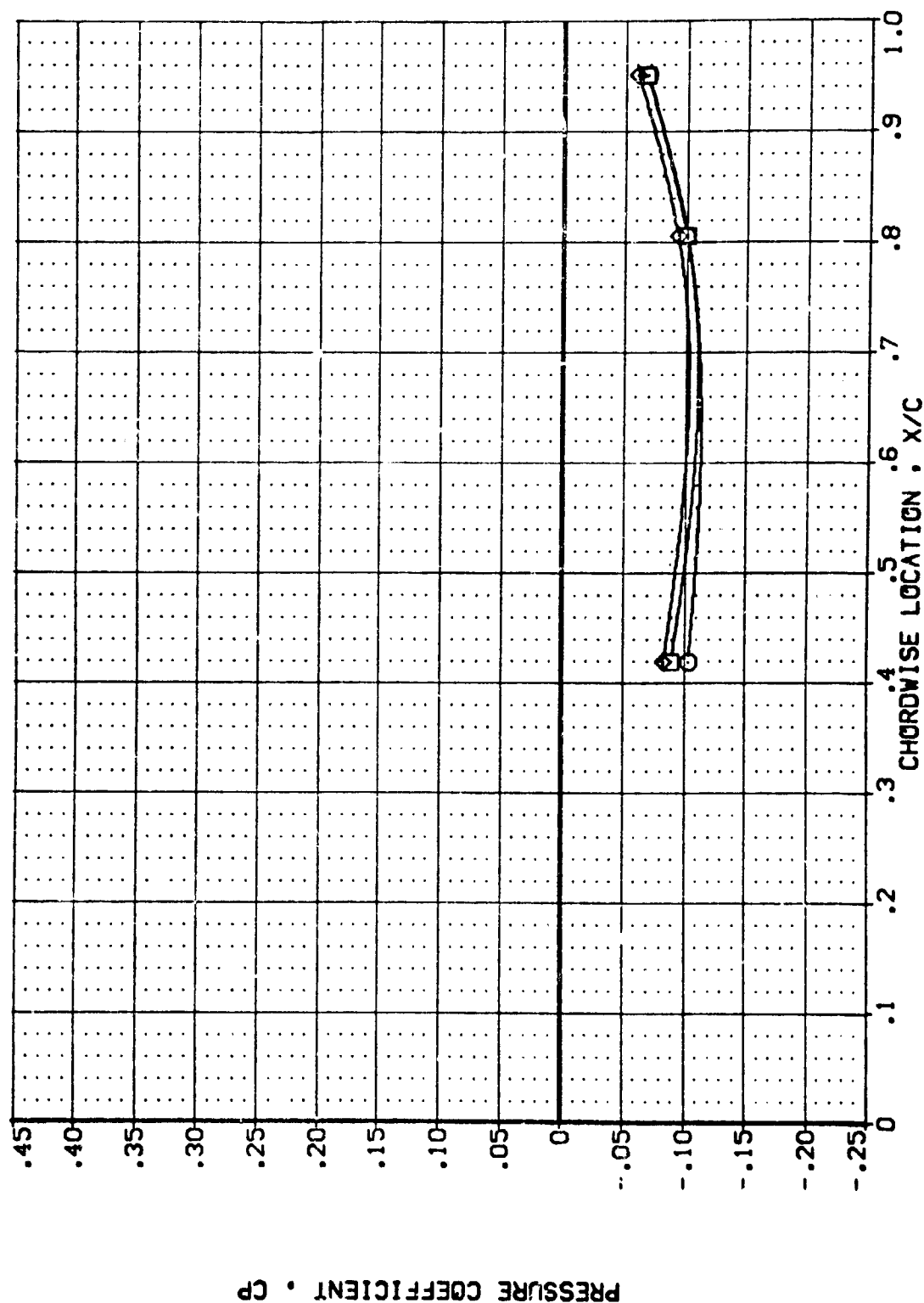
MACH = 3.000 ALPHA = .000 Y/B = .299

DATA SET SYMBOL

(LBZD08)
(LBZD41)
(LBZD03)

CONFIGURATION DESCRIPTION
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S3 UPPER WING PRESSURE

POWER CDR SRPR GHSAI
.000 26.860 1.000
1.000 26.860 .768 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .427

DATA SET SYMBOL. CONFIGURATION DESCRIPTION

{LBZ028}
{LBZ041}
{LBZ109}

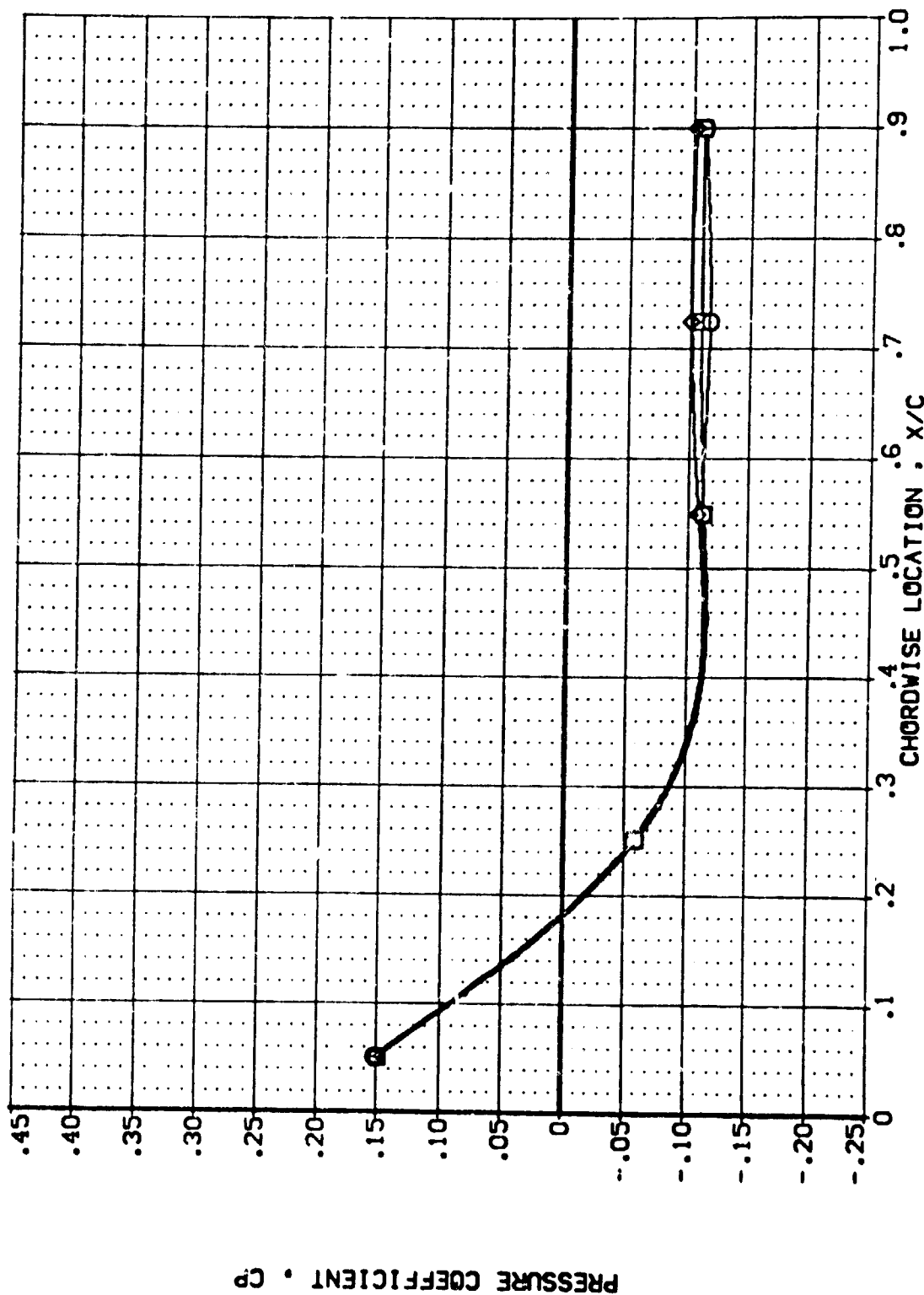
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S3 UPPER WING PRESSURE

POWER .000
1.000
1.000

QPR 26.860
26.860

SRPR .768
.768

GIMBAL 1.000
1.000
1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ038)
(UBZ041)
(UBZ109)

AVES 87-710
AVES 87-710
AVES 87-710

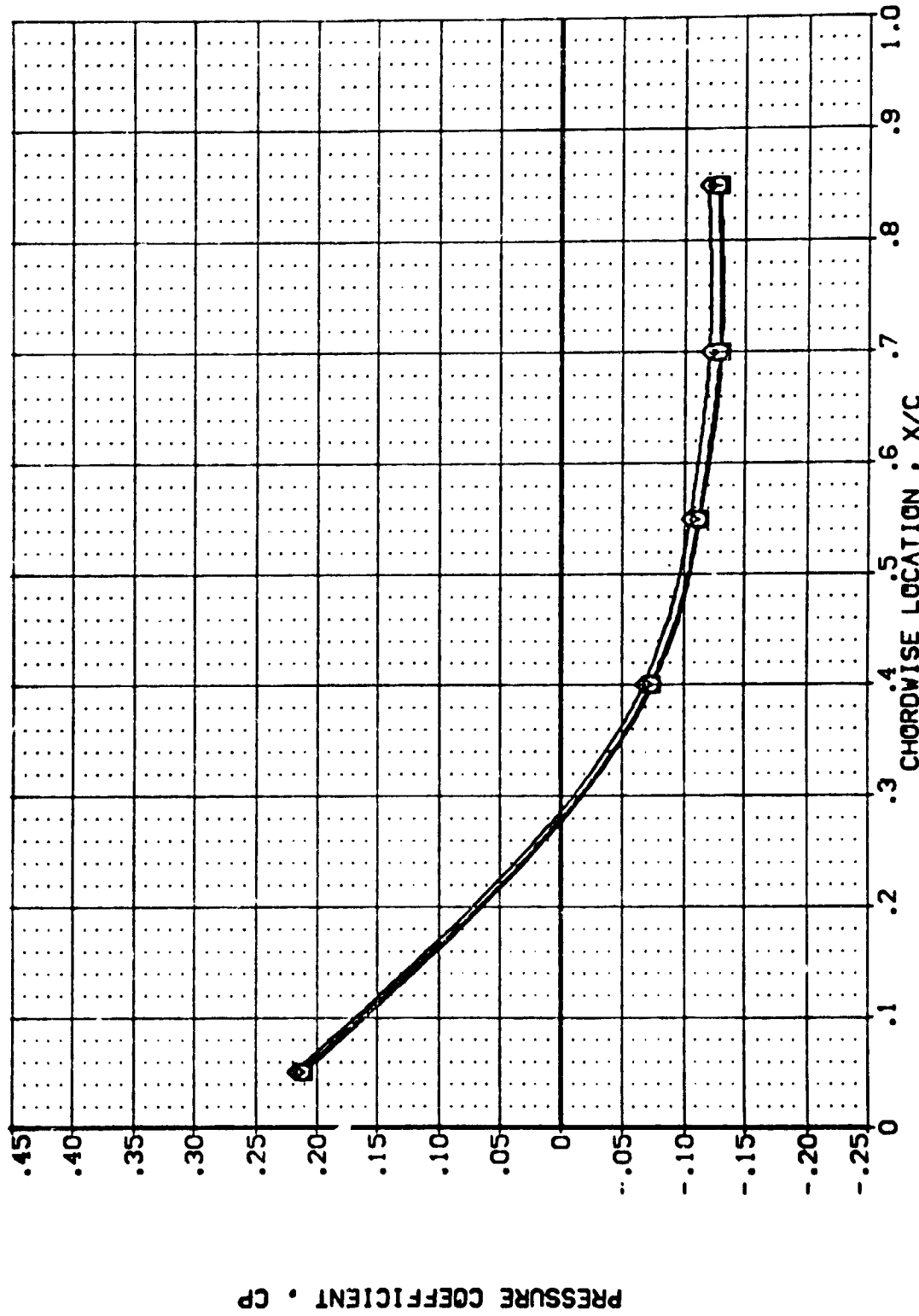
POWER
.000
1.000
1.000

SRPR
.768
.768

GINBAL
1.000
1.000
1.000

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

AI1ZC 01 T1 S1
AI1ZC 01 T1 S1
AI1ZC 01 T1 S1



SR8 PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

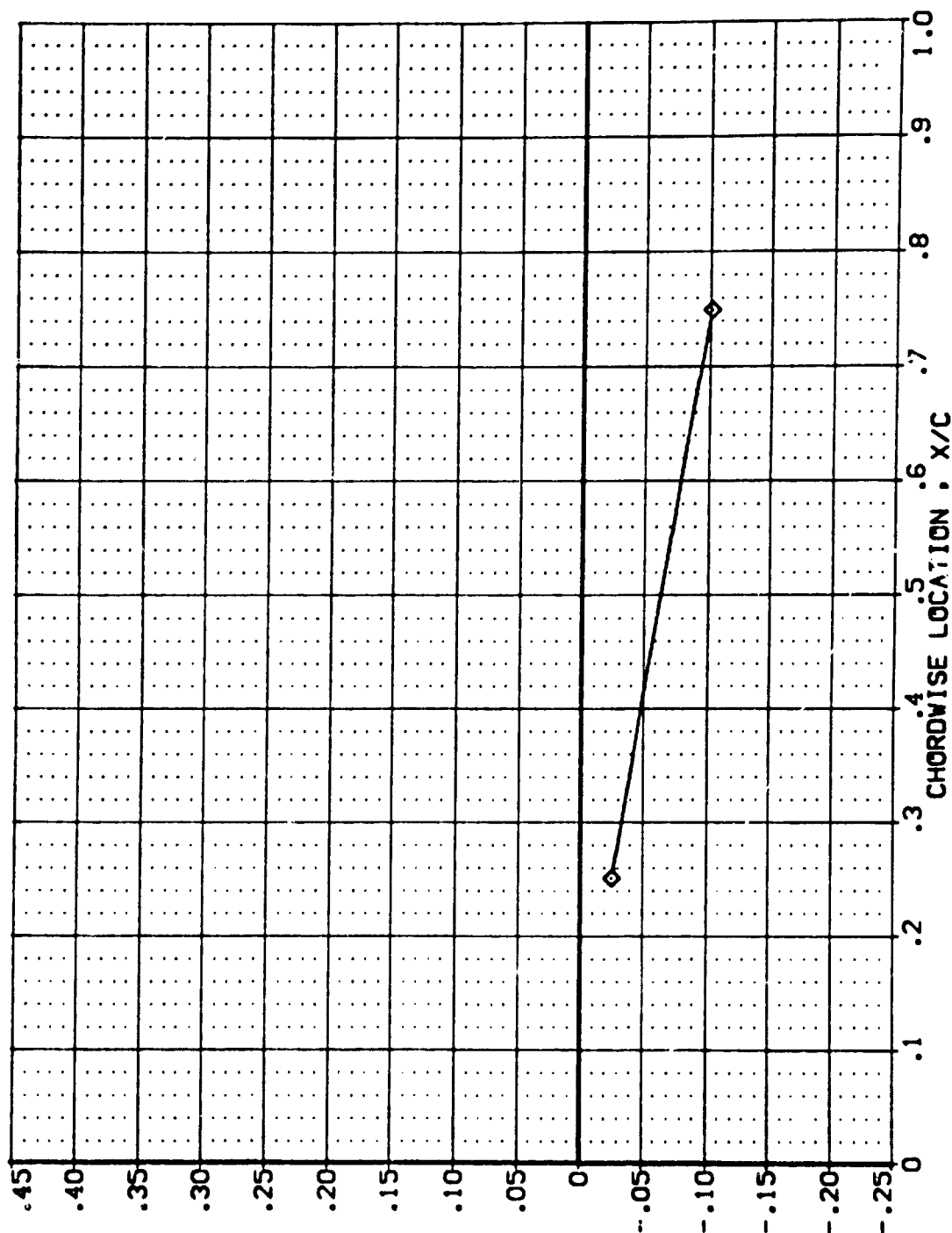
MACH = 3.000 ALPHA = .000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2008)
(UB2041)
(UB2103)

AVES 87-710 IAI2C OI TI SI UPPER WING PRESSURE
AVES 87-710 IAI2C OI TI SI UPPER WING PRESSURE
AVES 87-710 IAI2C OI TI SI UPPER WING PRESSURE

POWER QPR SQPR GIMBAL
.000 .000 1.000
1.000 26.860 .768
1.000 26.860 .768

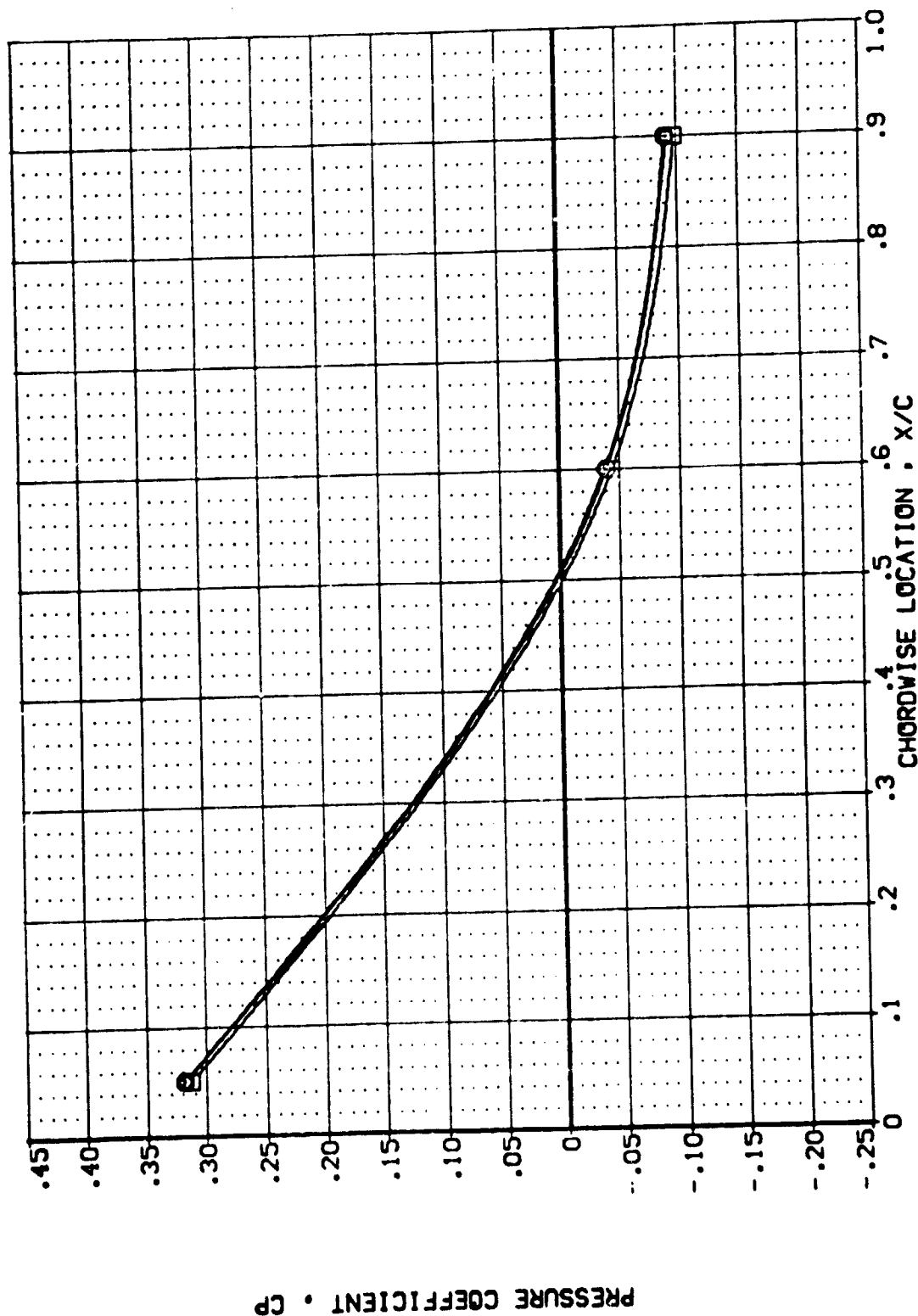


SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .780

DATA SET SYMBOL: **Q** CONFIGURATION DESCRIPTION:
 (UBZD08) AVES 87-710 I A12C 01 T1 S1 UPPER WING PRESSURE
 (UBZD01) AVES 87-710 I A12C 01 T1 S1 UPPER WING PRESSURE
 (UBZ108) AVES 87-710 I A12C 01 T1 S3 UPPER WING PRESSURE

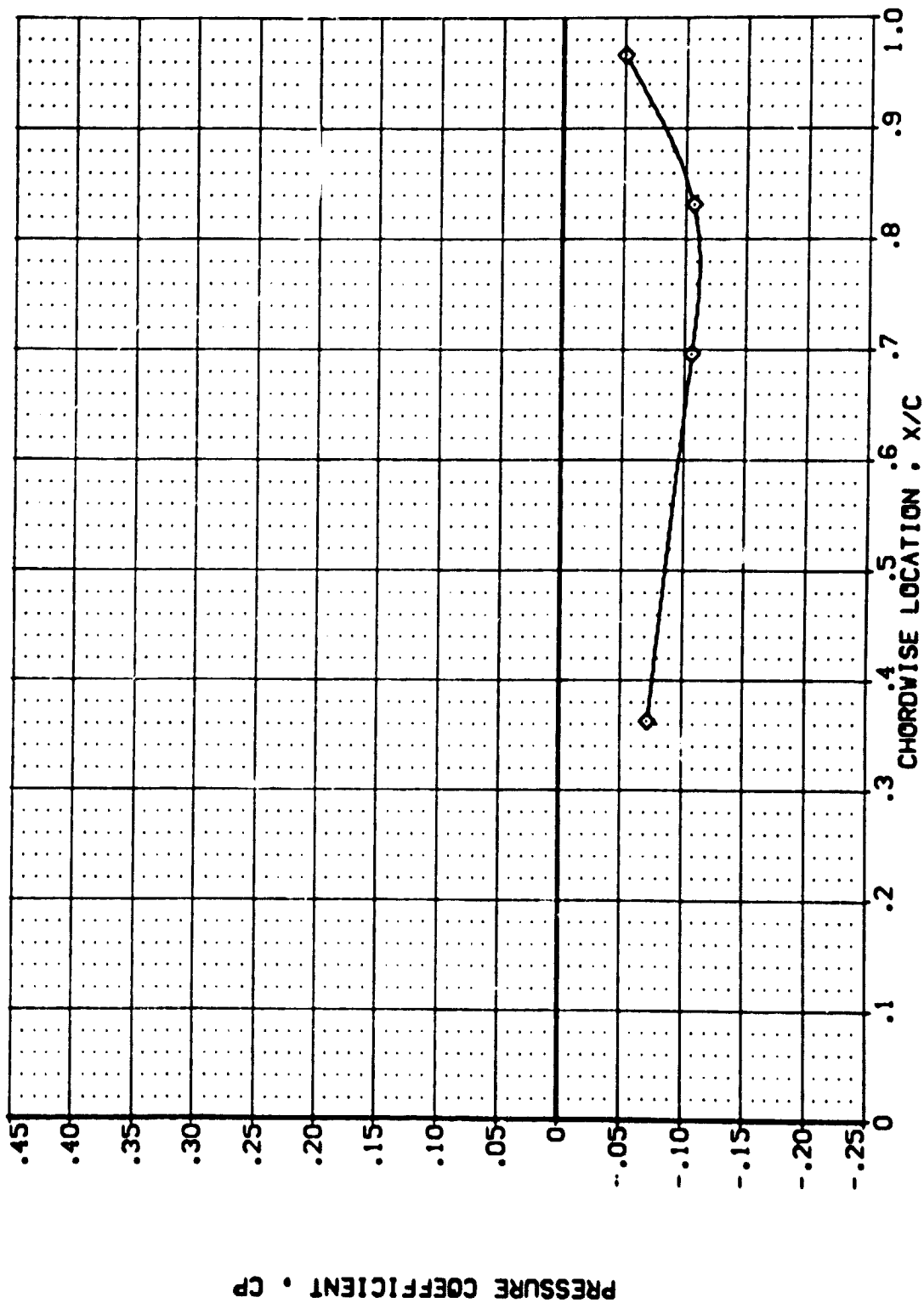
POWER GPR SPRR GIMBAL
 1.000 26.860 .768 1.000
 1.000 26.860 .768 1.000



SR8 PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/P G/M/BAL
 (UBZ008) ASES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE 1.000 26.860 1.000
 (UBZ041) ASES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE 1.000 26.860 1.000
 (UBZ108) ASES 87-710 IAI2C 01 T1 S3 UPPER WING PRESSURE 1.000 26.860 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL

(UB2008)
(UB2041)
(UB2109)

CONFIGURATION DESCRIPTION

AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S3 UPPER WING PRESSURE

POWER C/P

.000
1.000
1.000

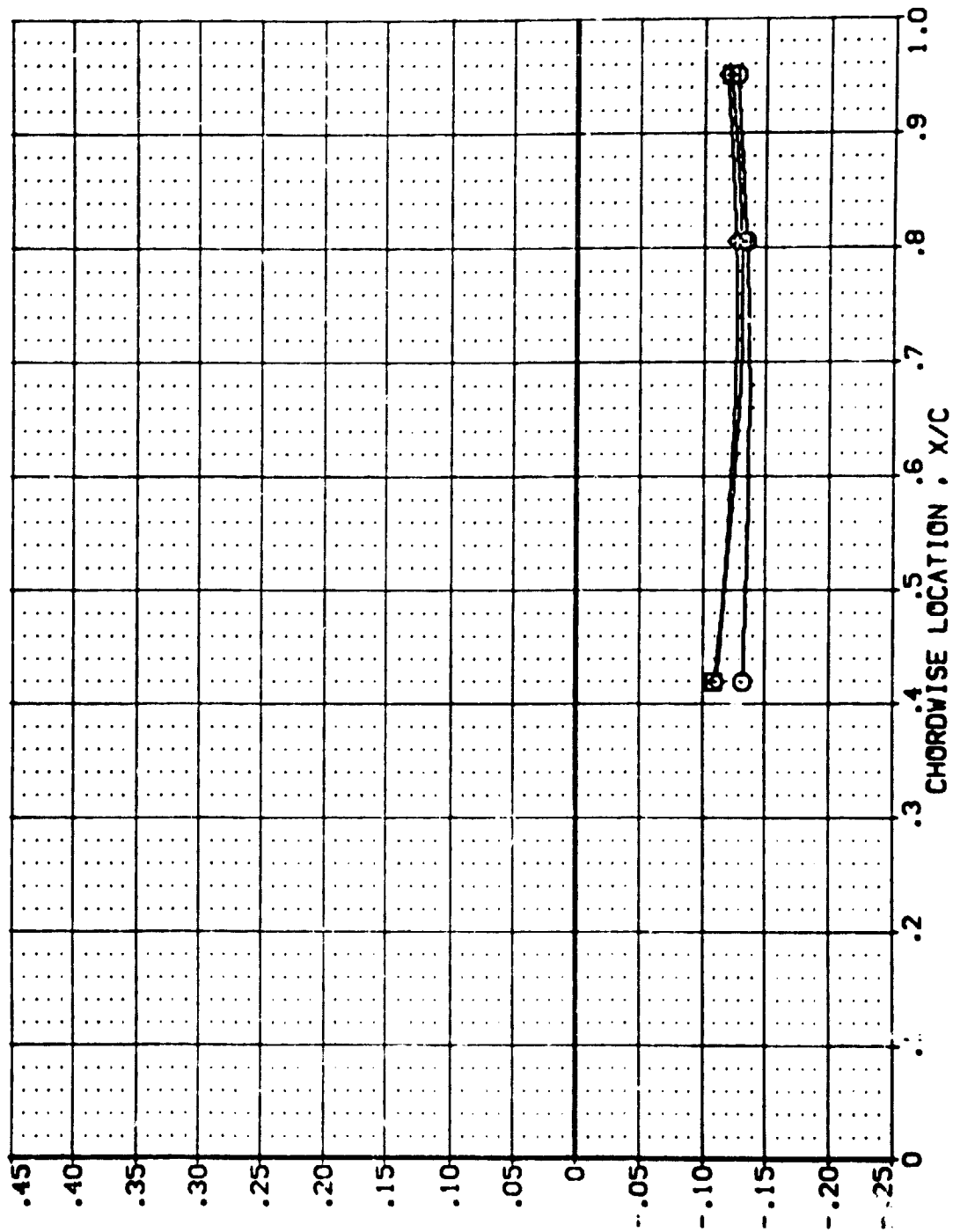
SRPR

.768
.768

GINBAL

1.000
1.000
1.000

PRESSURE COEFFICIENT - CP



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

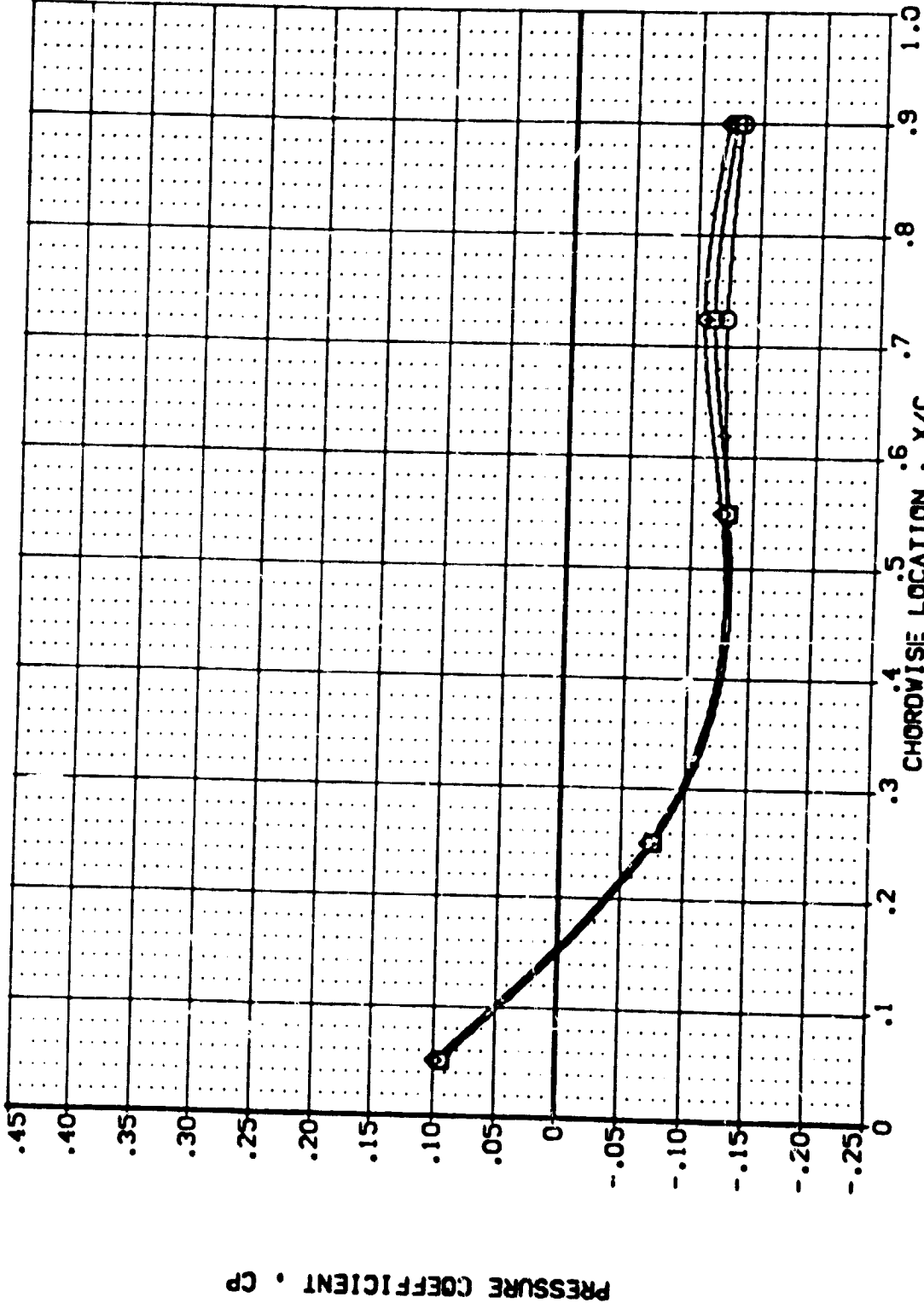
MACH = 3.000 ALPHA = 8.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2008)
(UB2041)
(UB2109)

AVES 07-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 07-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 07-710 IAI2C 01 T1 S3 UPPER WING PRESSURE

POWER GPR SPMR GIMBAL
1.000 26.860 .768 1.000
1.000 26.860 .768 1.000



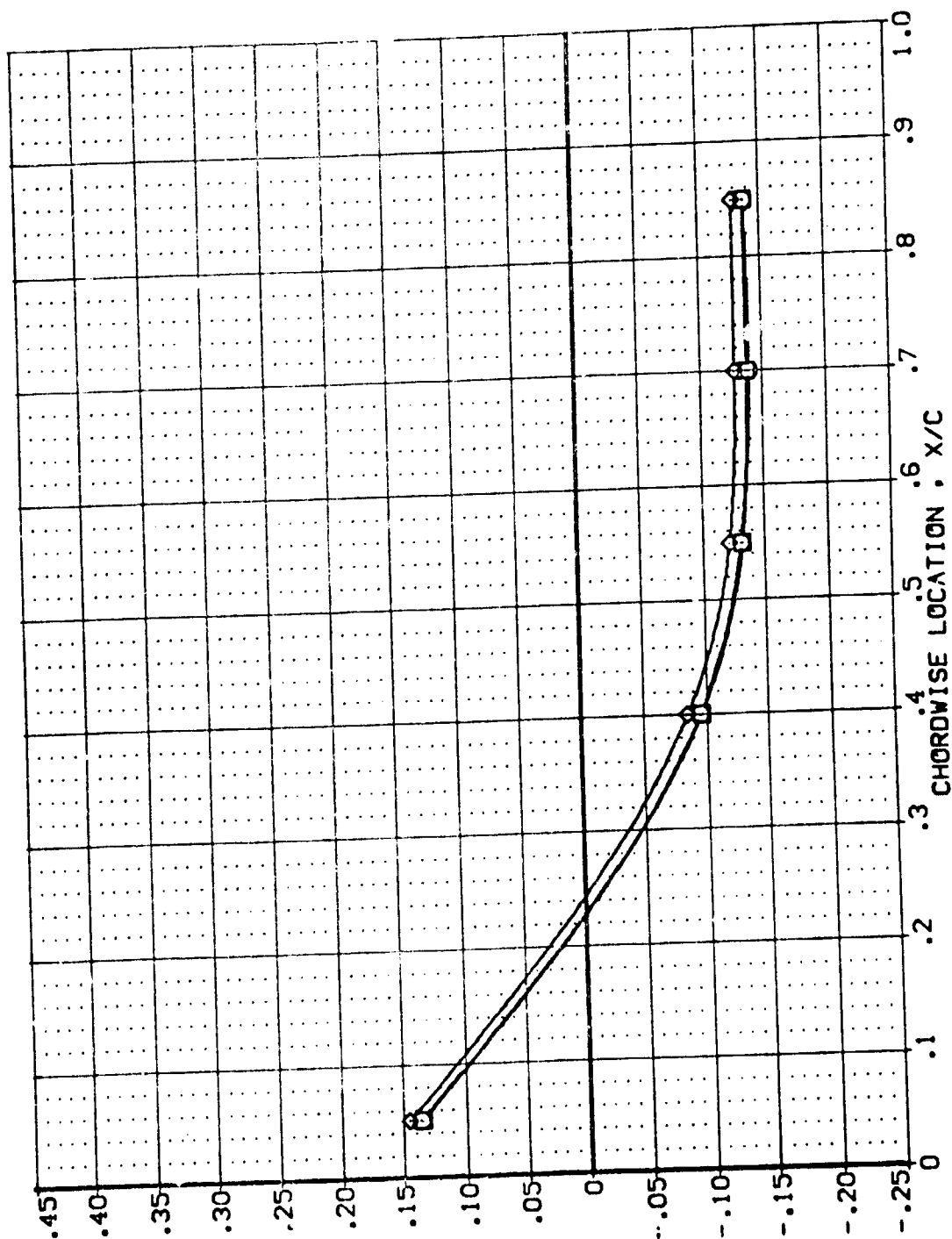
SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZD08) ASES 87-710 IALZC 01 T1 S1 UPPER WING PRE-SURE
 (UBZD41) ASES 87-710 IALZC 01 T1 S1 UPPER WING PRE-SURE
 (UBZD09) ASES 87-710 IALZC 01 T1 S3 UPPER WING PRE-SURE

POWER C/P SR-PR GIMBAL
 .000 .768 1.000
 1.000 26.860 1.000
 1.000 26.860 .768

PRESSURE COEFFICIENT, CP

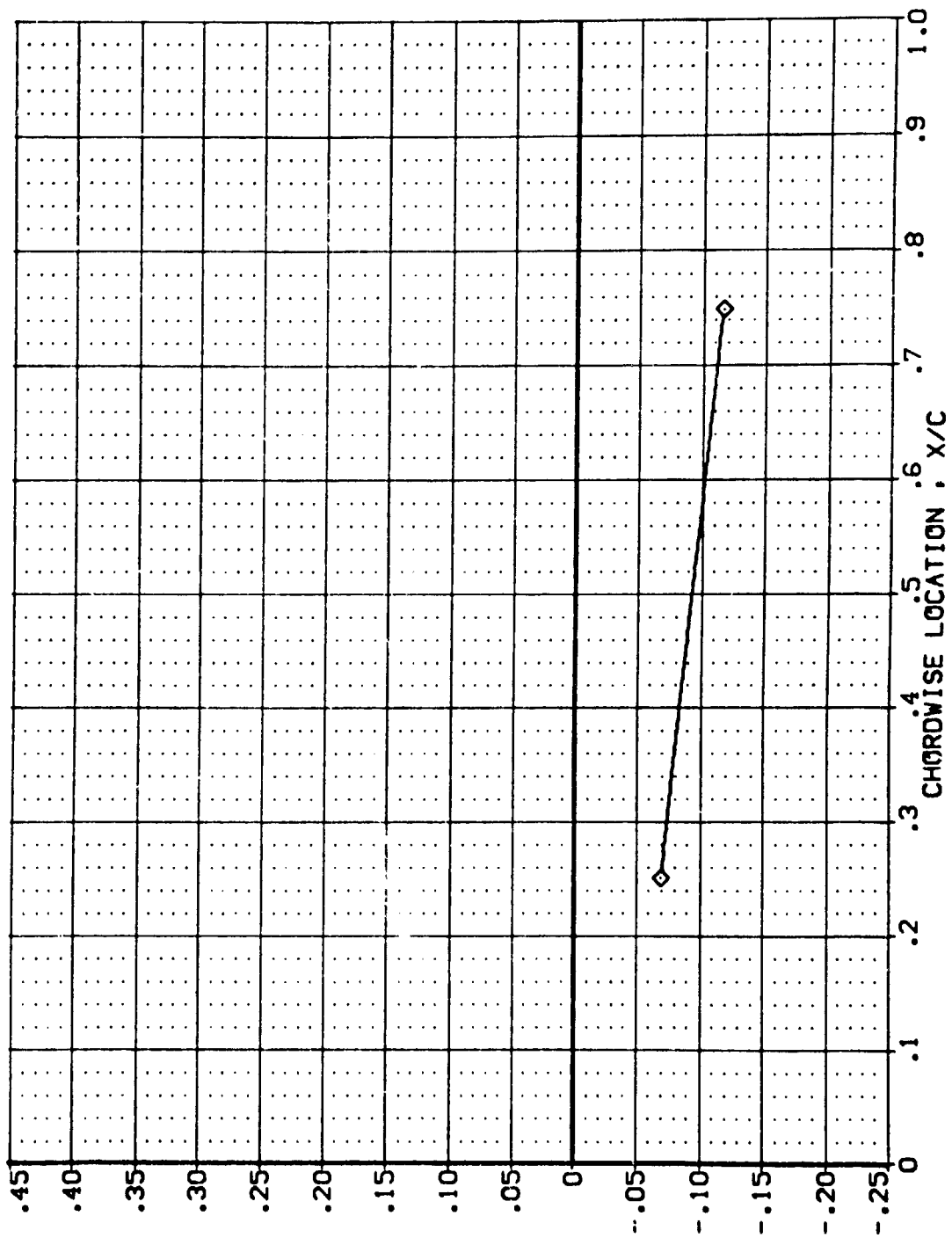


SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .673 PAGE 520

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZ038) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ041) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (UBZ108) AVES 87-710 IAI2C 01 T1 S3 UPPER WING PRESSURE

POWER .000
 .000
 1.000
 1.000
 .768
 .768
 26.860
 26.860
 GIMBAL
 1.000
 1.000
 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2038)
(UB2041)
(UB2109)

AMES 87-710
AMES 87-710
AMES 87-710

IA12C 01 T1 S1
IA12C 01 T1 S1
IA12C 01 T1 S3

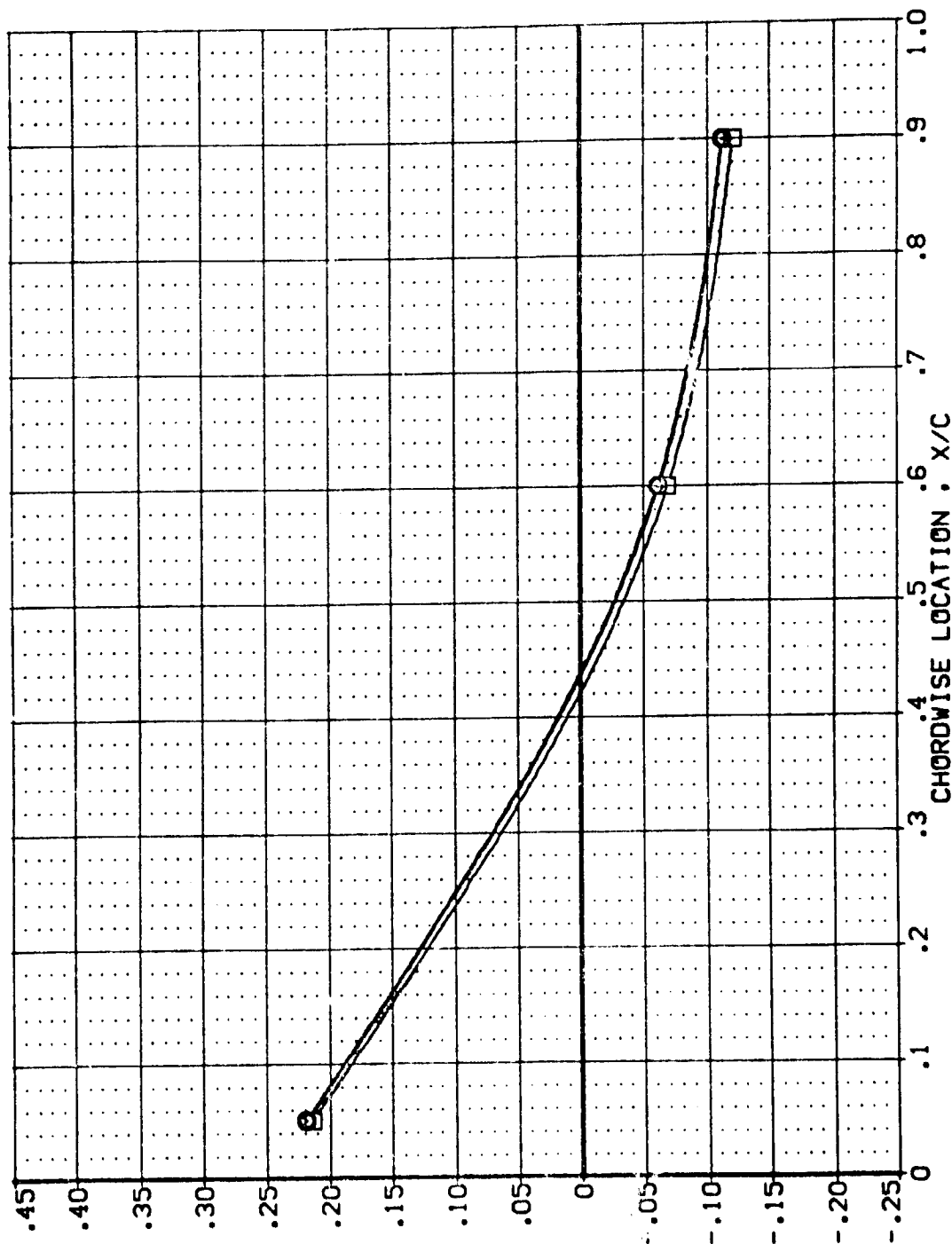
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER 0.000
POWER 1.000
POWER 1.000

OPR 26.860
OPR 26.860
OPR 26.860

SRPR .769
SRPR .769
SRPR .769

GINBAL 1.000
GINBAL 1.000
GINBAL 1.000



PRESSURE COEFFICIENT, CP

SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .887

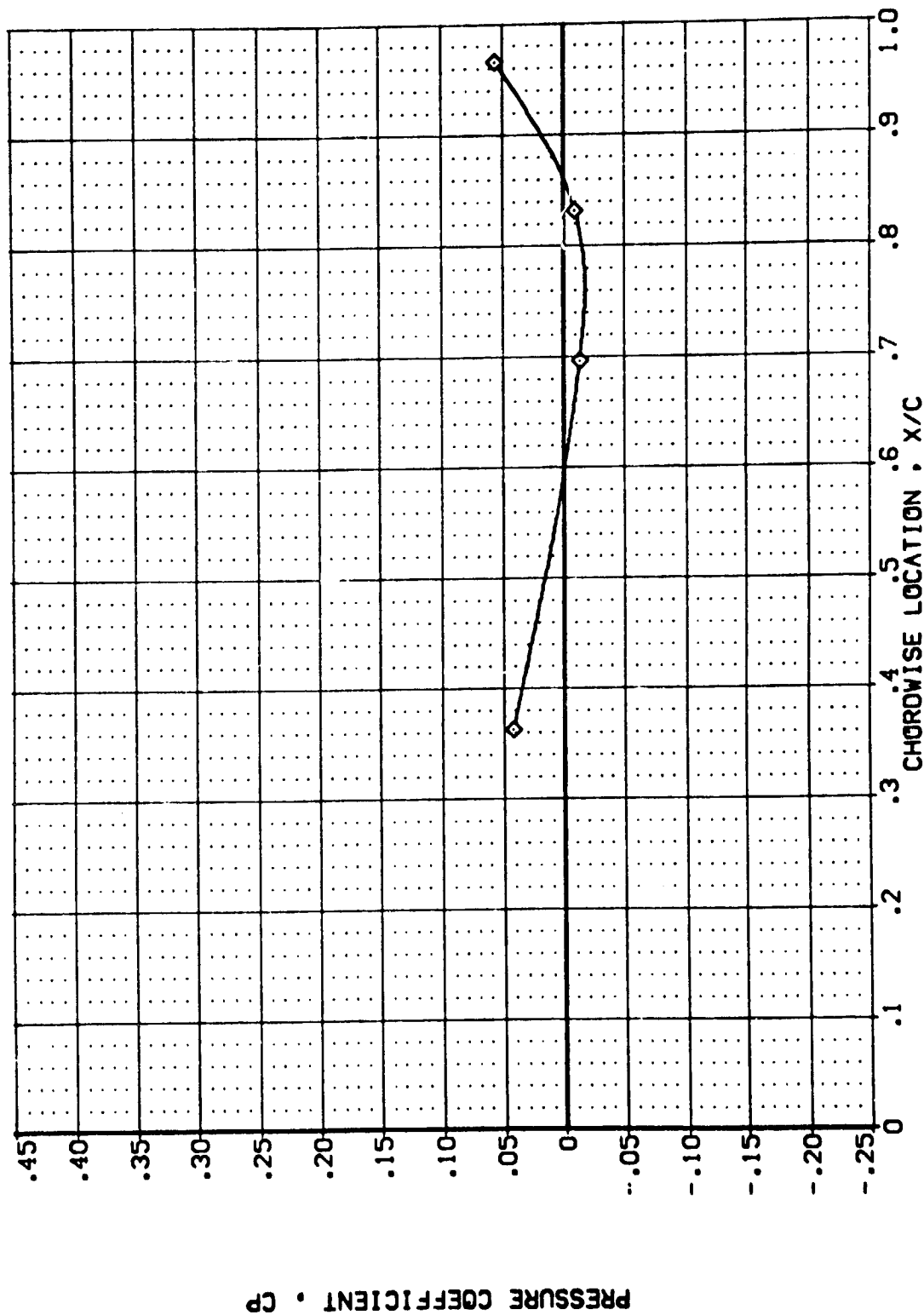
PAGE 522

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CPR SRPR GIMBAL

(UBZD46) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 23.860 .826 1.000

(UBZD50) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE 1.000 23.860 .826 1.000

(UBZ112) AVES 87-710 IAI2C 01 T1 S3 UPPER WING PRESSURE 1.000 23.860 .826 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .299 PAGE 523

DATA SET SYMBOL

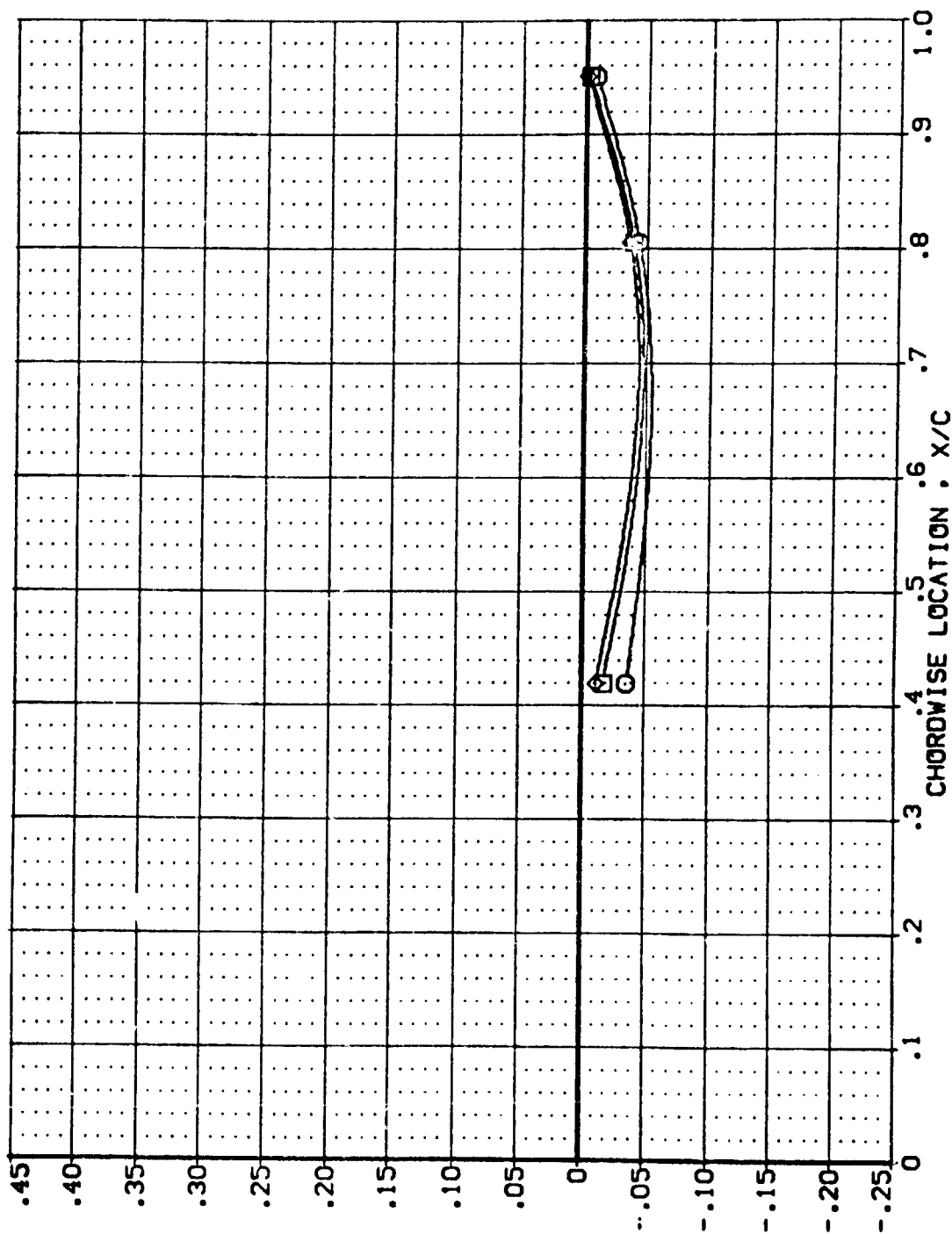
(UBZ046)
(UBZ050)
(UBZ112)

CONFIGURATION DESCRIPTION

AVES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IALZC 01 T1 S3 UPPER WING PRESSURE

POWER 1.000
3PR 23.860
SRPR .826
GIMBAL 1.000

PRESSURE COEFFICIENT • CP



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .427

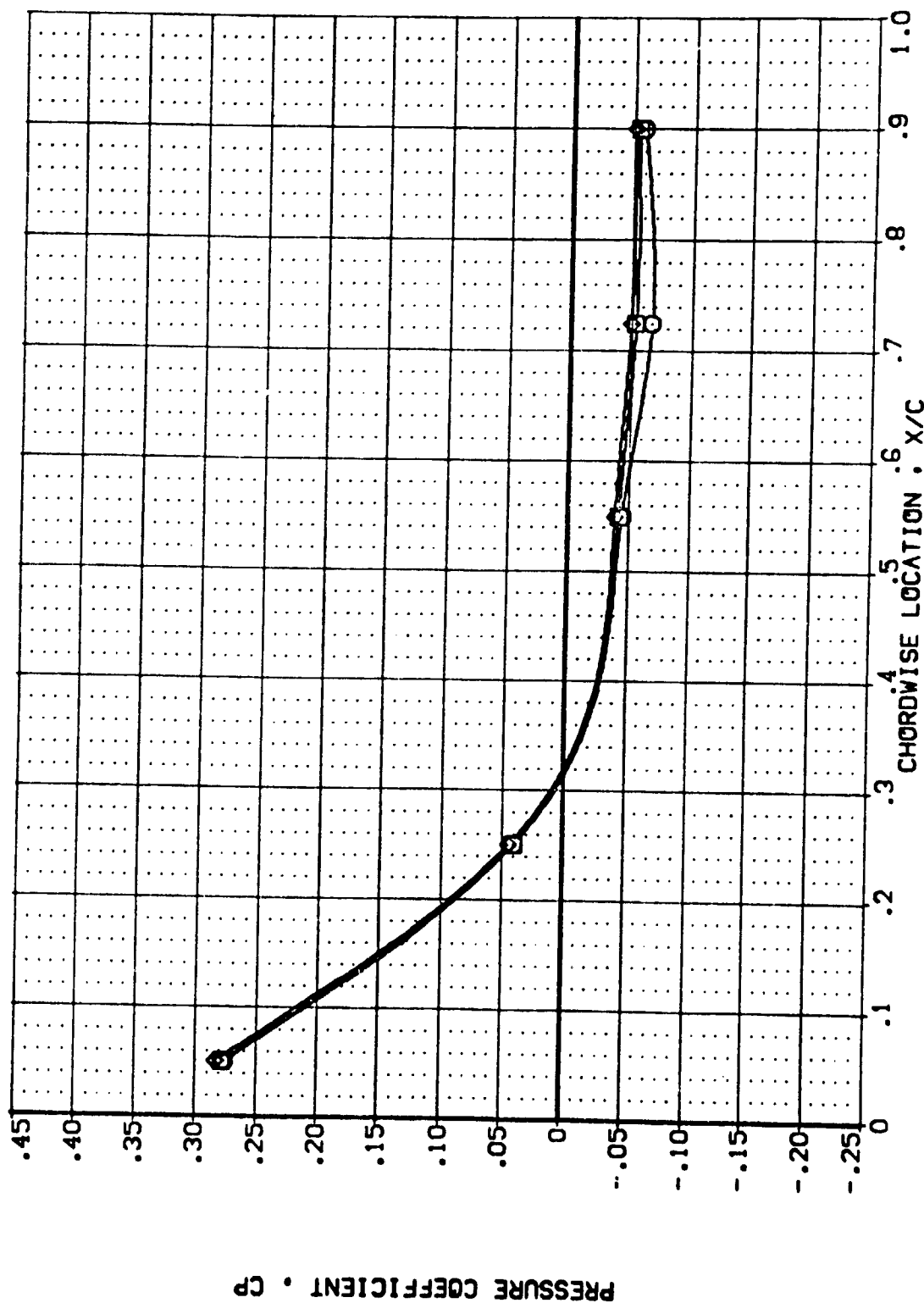
DATA SET SYMBOL

(UB2046)
(UB2050)
(UB2112)

CONFIGURATION DESCRIPTION

AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S3 UPPER WING PRESSURE

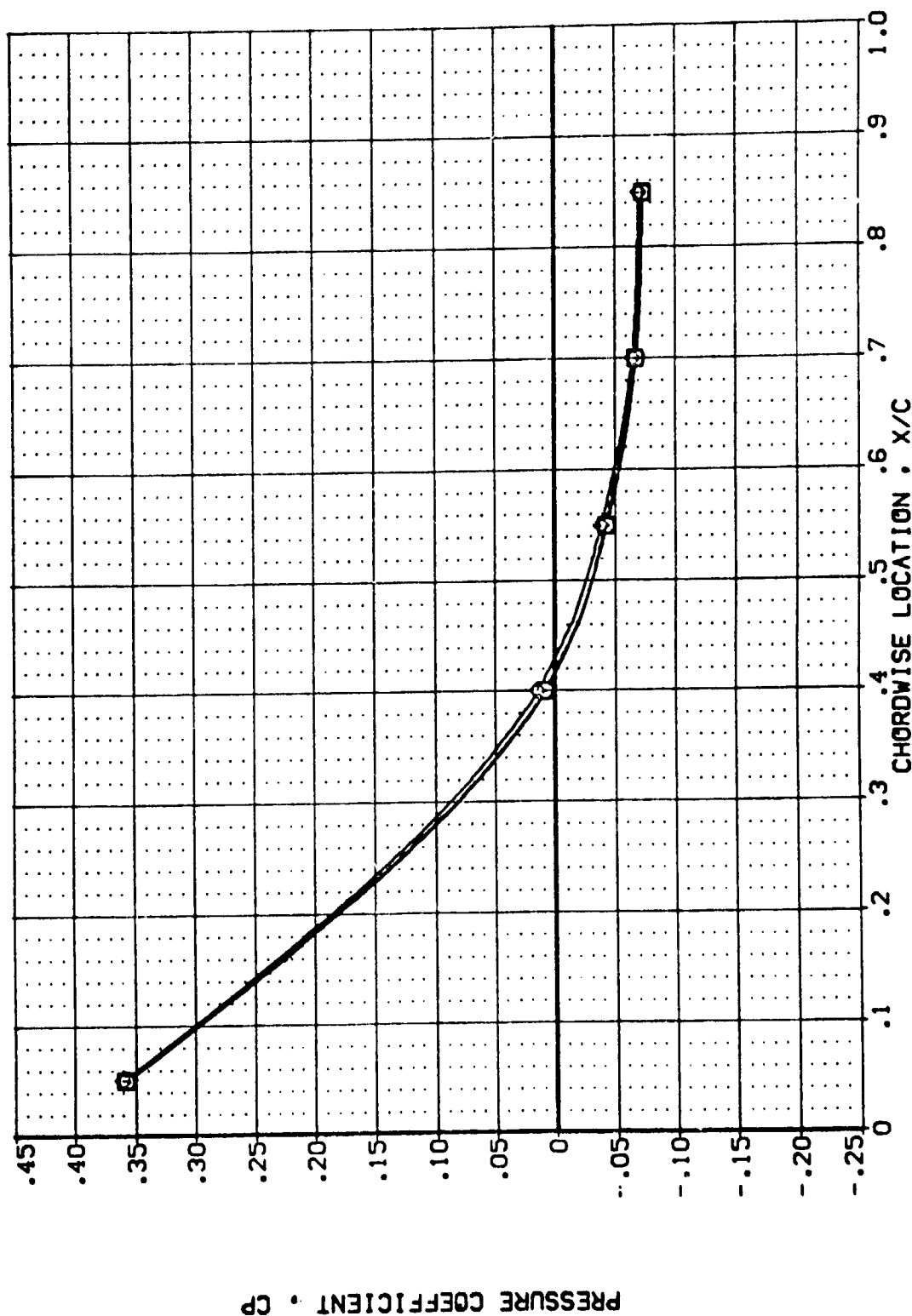
POWER DFR SR-PR GIMBAL
.000 23.860 .826 1.000
1.000 23.860 .826 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SNPR	GIMBAL
(UBZD46)	AVES 87-710 IAI2C 01 T1 S1	1.000			1.000
(UBZD50)	AVES 87-710 IAI2C 01 T1 S1	1.000	23.850	.826	1.000
(UBZ112)	AVES 87-710 IAI2C 01 T1 S3	1.000	23.850	.826	1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

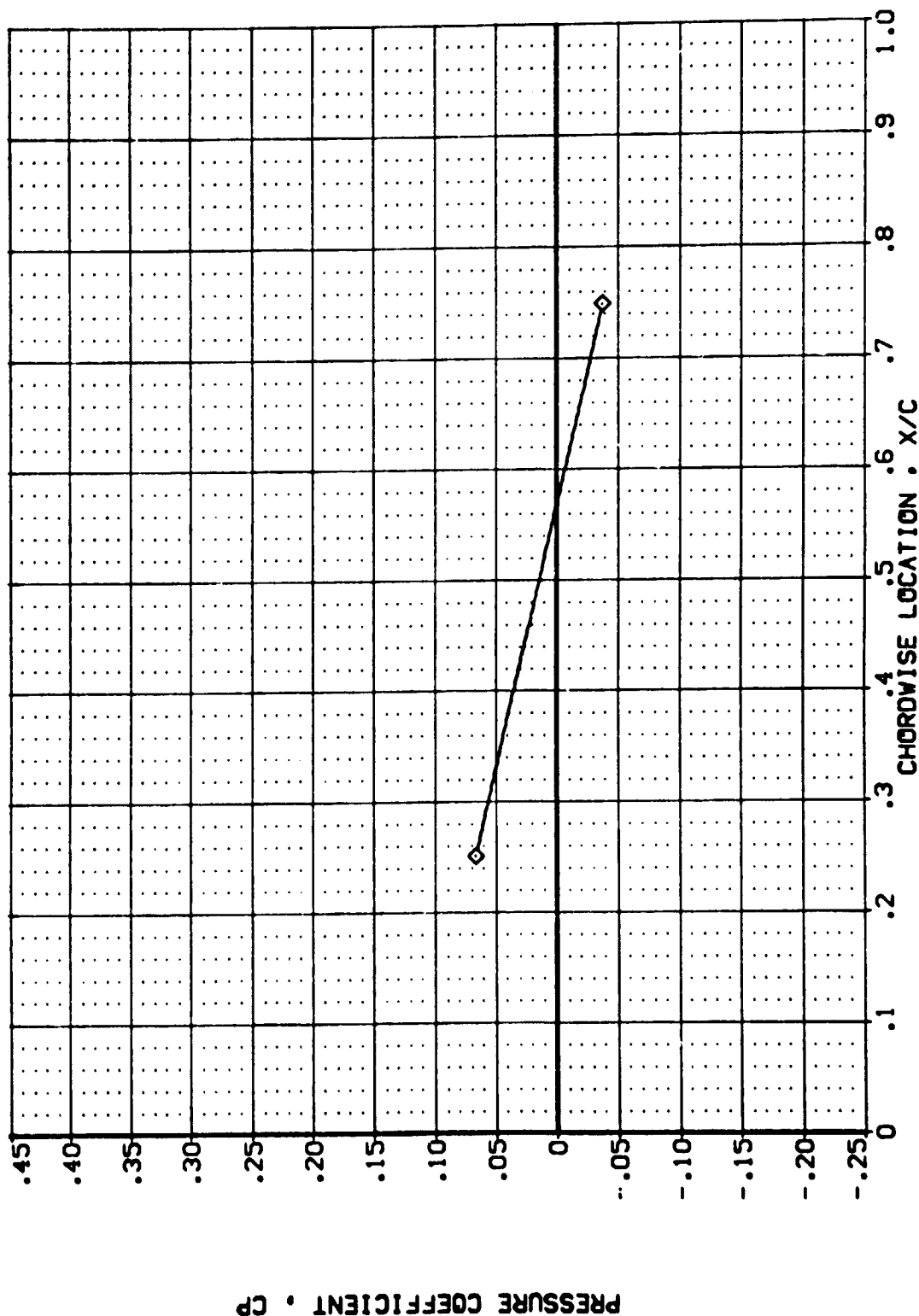
MACH = 3.500 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SHPR GINBAL

(UB2045) AYES 87-710 IA12C 01 T1 S1 UPPER WING PRESSURE .000 23.860 .826 1.000

(UB2050) AYES 87-710 IA12C 01 T1 S1 UPPER WING PRESSURE 1.000 23.860 .826 1.000

(UB2112) AYES 87-710 IA12C 01 T1 S3 UPPER WING PRESSURE 1.000 23.860 .826 1.000

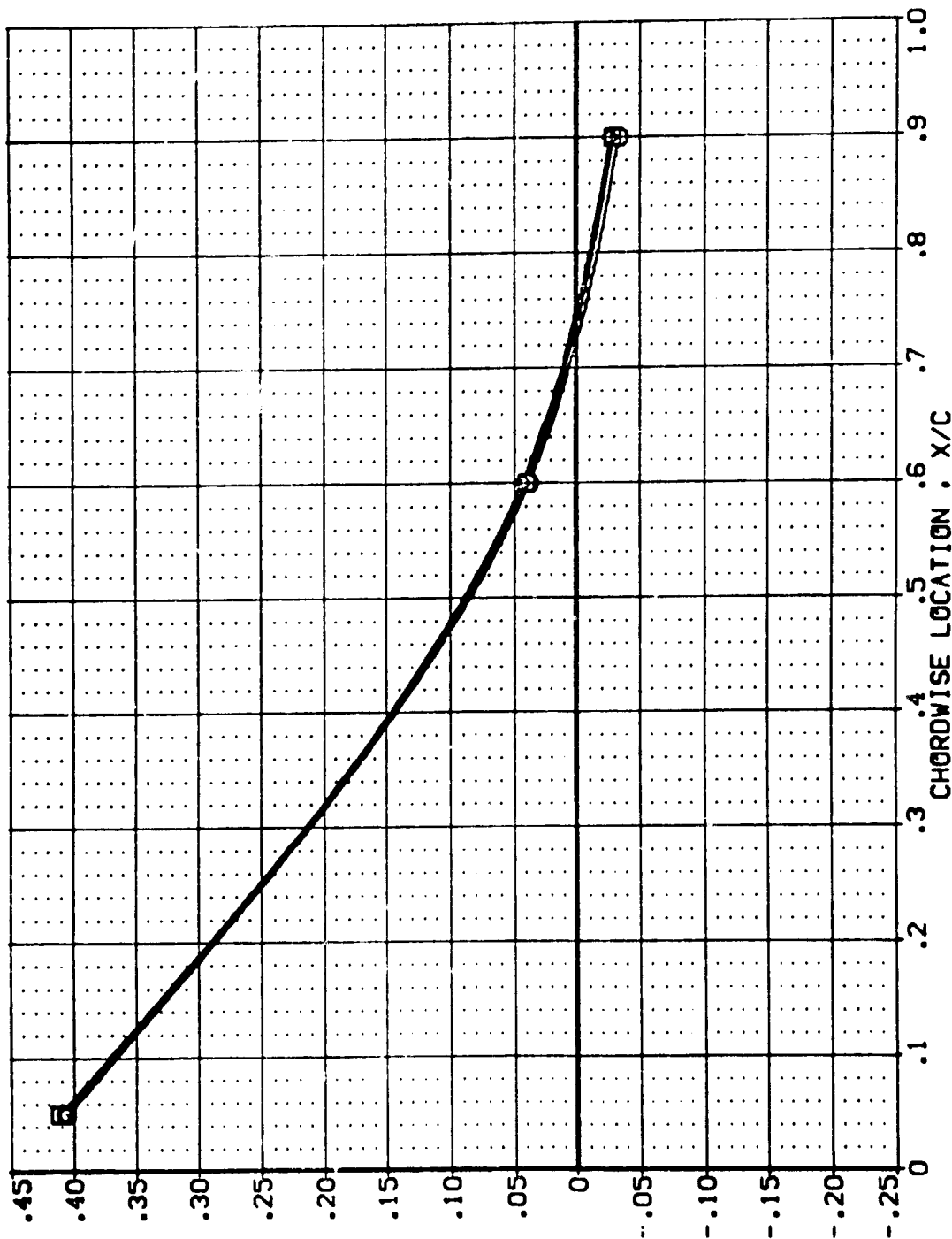


SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

DATA SET SYMBOL
(UBZ046)
(UBZ050)
(UBZ112)

CONFIGURATION DESCRIPTION
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S3 UPPER WING PRESSURE

POWER GPR SPPR GINGAL
1.000 23.860 .826 1.000
1.000 23.860 .826 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .887

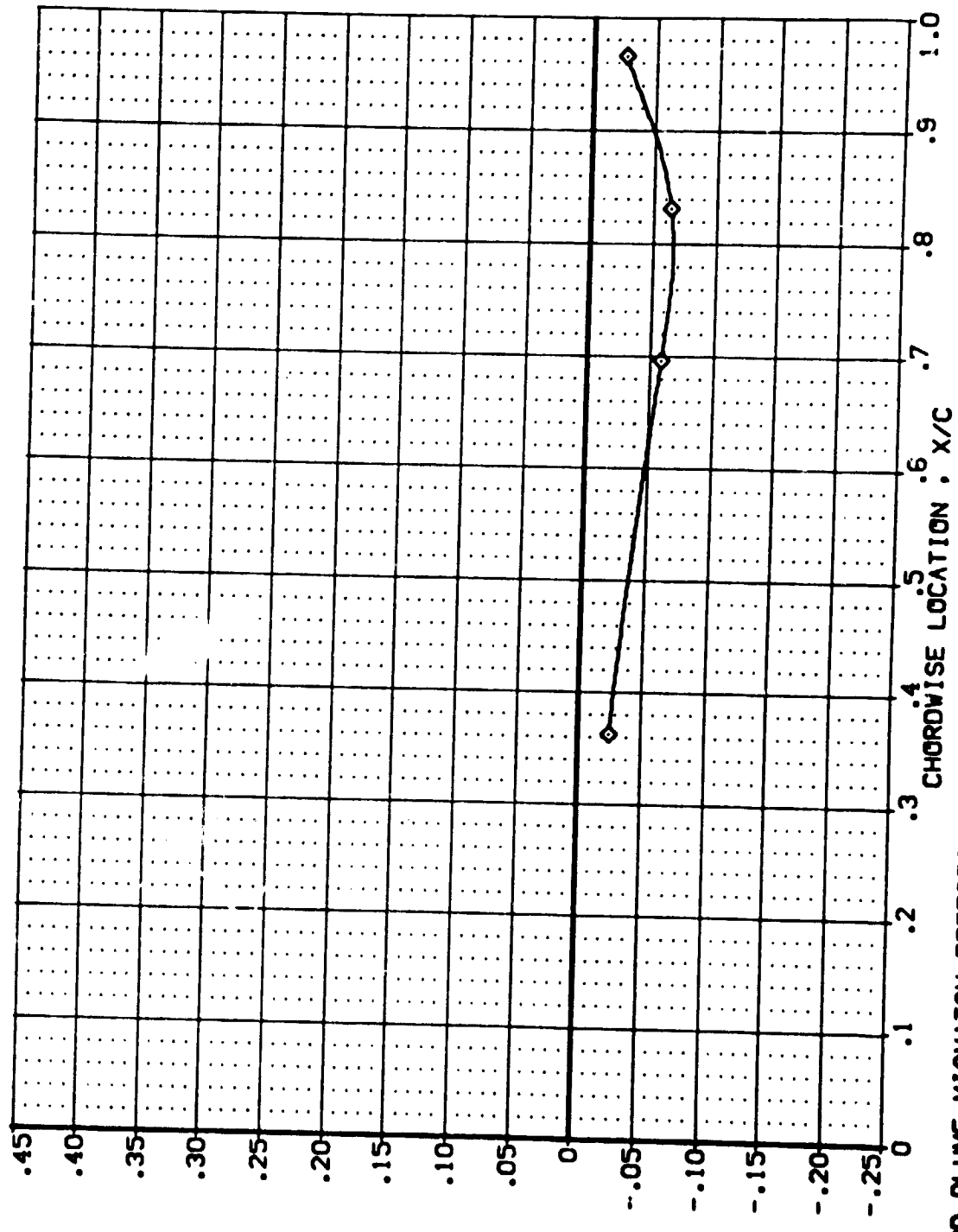
DATA SET SYMBOL

(UBZD46)
(UBZD50)
(UBZ112)

CONFIGURATION DESCRIPTION

AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S3 UPPER WING PRESSURE

POWER 0.000
1.000
1.000
SRPR 0.826
0.826
1.000
GIMBAL



PRESSURE COEFFICIENT • CP

SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

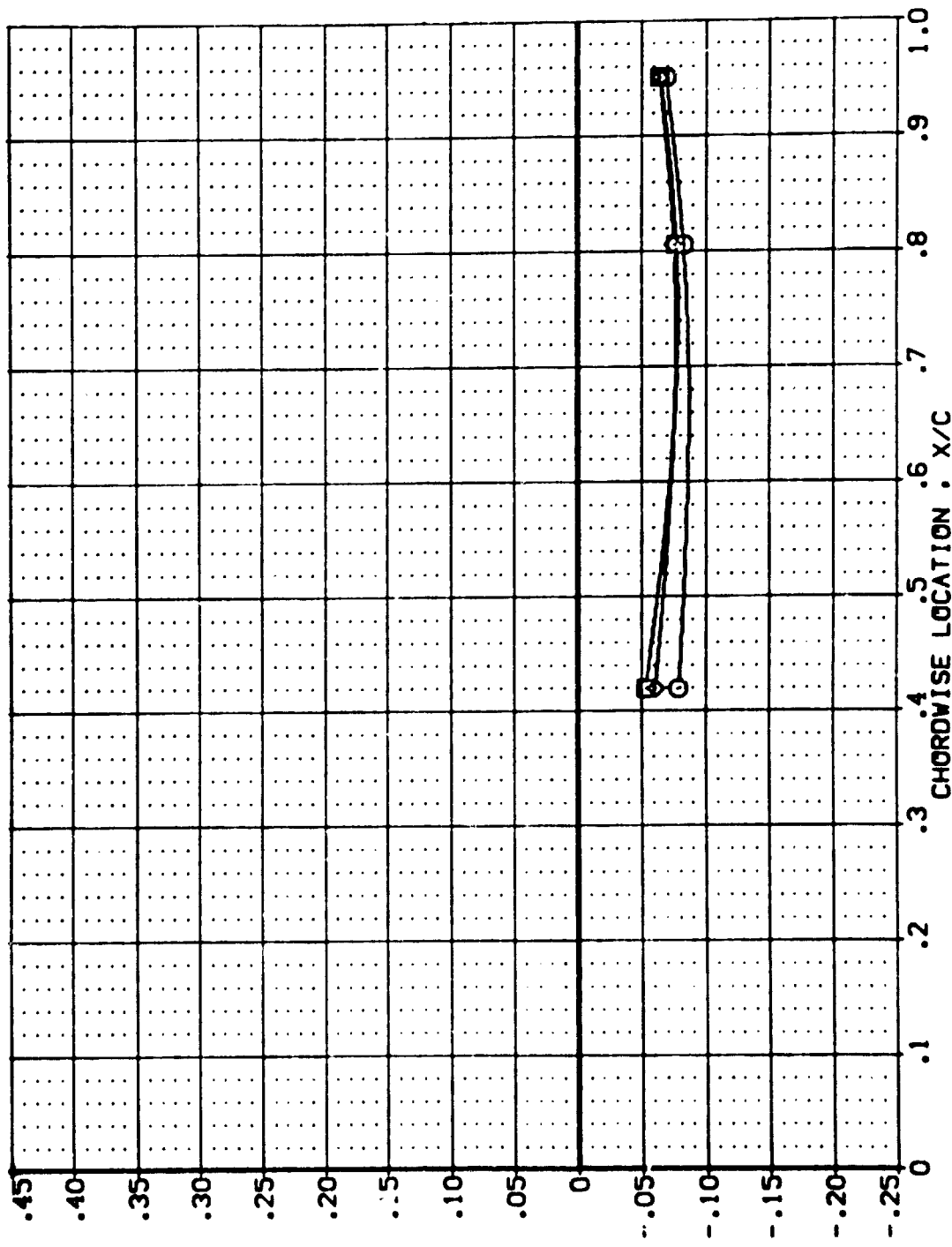
MACH = 3.500 ALPHA = .000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ046)
(UBZ050)
(UBZ112)

AVES 07-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 07-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 07-710 IAI2C 01 T1 S3 UPPER WING PRESSURE

POWER C/R S/RFR G/MBAL
.000 23.860 1.000
1.000 23.860 .826 1.000

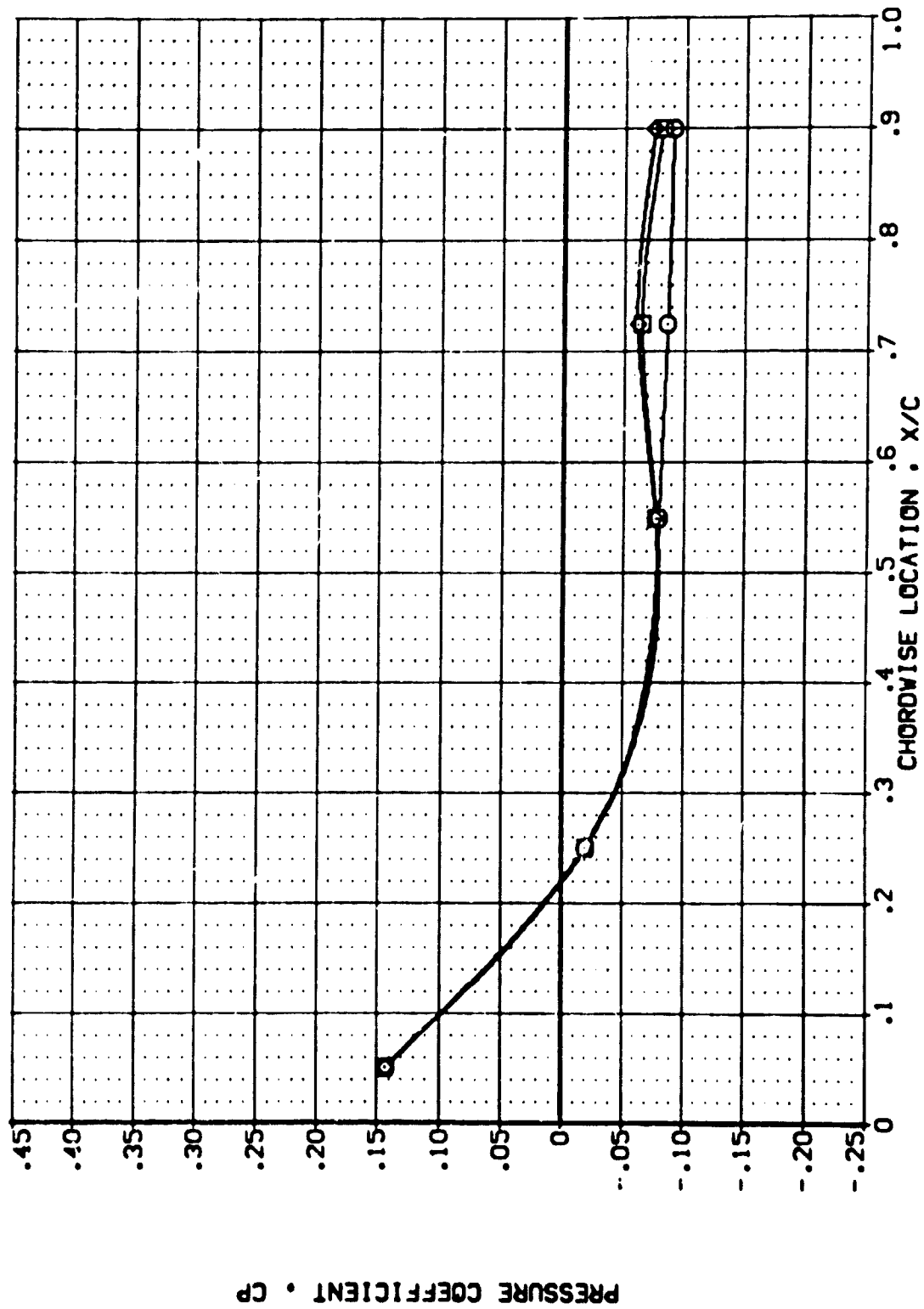


SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SPRR GIMBAL

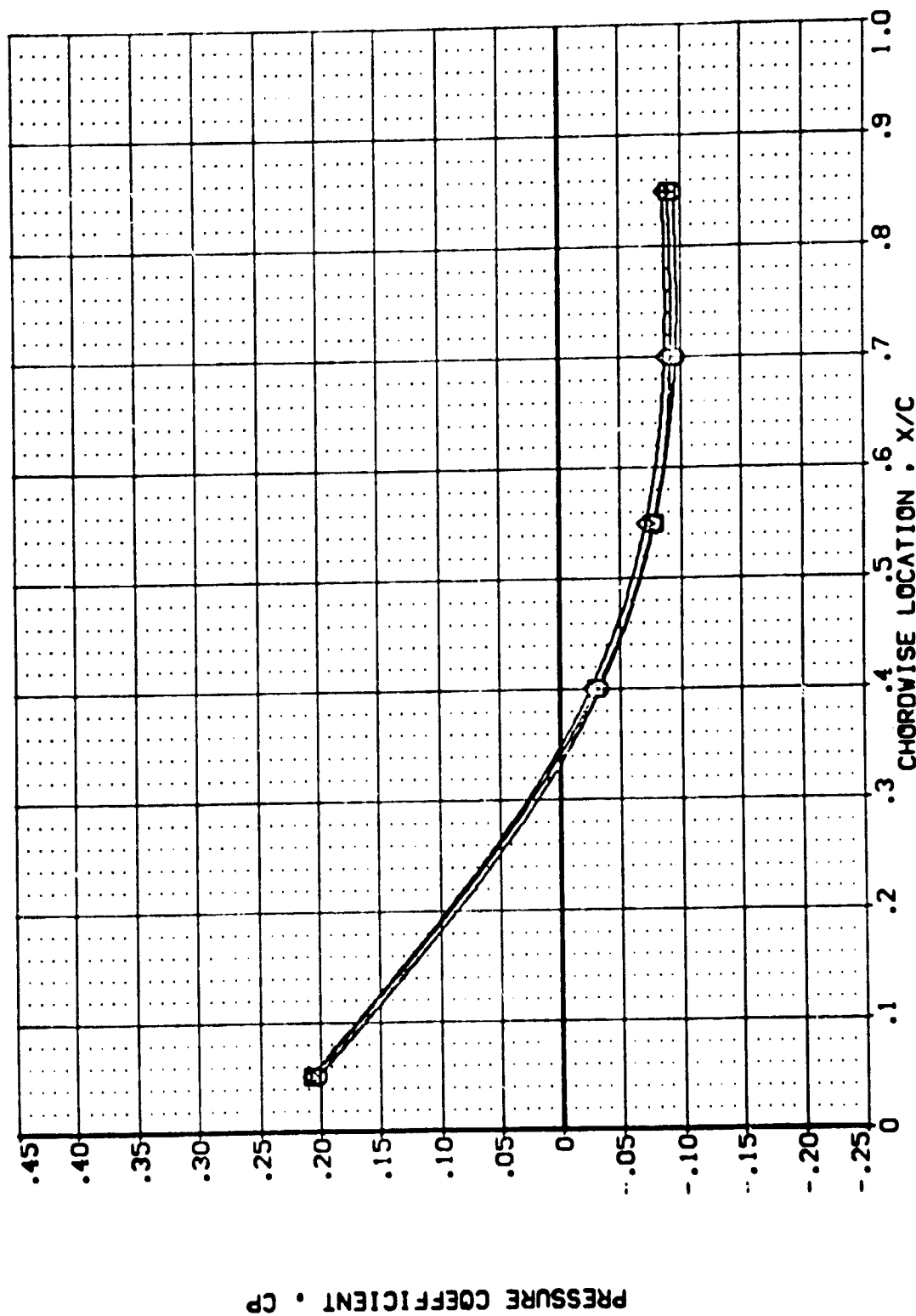
(UB2046)	AMES 87-710	IA12C 01 T1 S1	UPPER WING PRESSURE	.000	23.860	.826	1.000
(UB2050)	AMES 87-710	IA12C 01 T1 S1	UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UB2112)	AMES 87-710	IA12C 01 T1 S3	UPPER WING PRESSURE	1.000	23.860	.826	1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .534 PAGE 531

DATA SET SYMBOL: **8** CONFIGURATION DESCRIPTION: **AMES 87-710** **1A12C 01 T1 S1** **UPPER WING PRESSURE** **POWER** **DPR** **SRPR** **GIMBAL**
(UB2046) **AMES 87-710** **1A12C 01 T1 S1** **UPPER WING PRESSURE** **.000** **23.860** **.826** **1.000**
(UB2050) **AMES 87-710** **1A12C 01 T1 S1** **UPPER WING PRESSURE** **1.000** **23.860** **.826** **1.000**
(UB2112) **AMES 87-710** **1A12C 01 T1 S3** **UPPER WING PRESSURE** **1.000** **23.860** **.826** **1.000**



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .673

DATA SET SYMBOL

(UR1046)
(UR1047)
(UR1048)

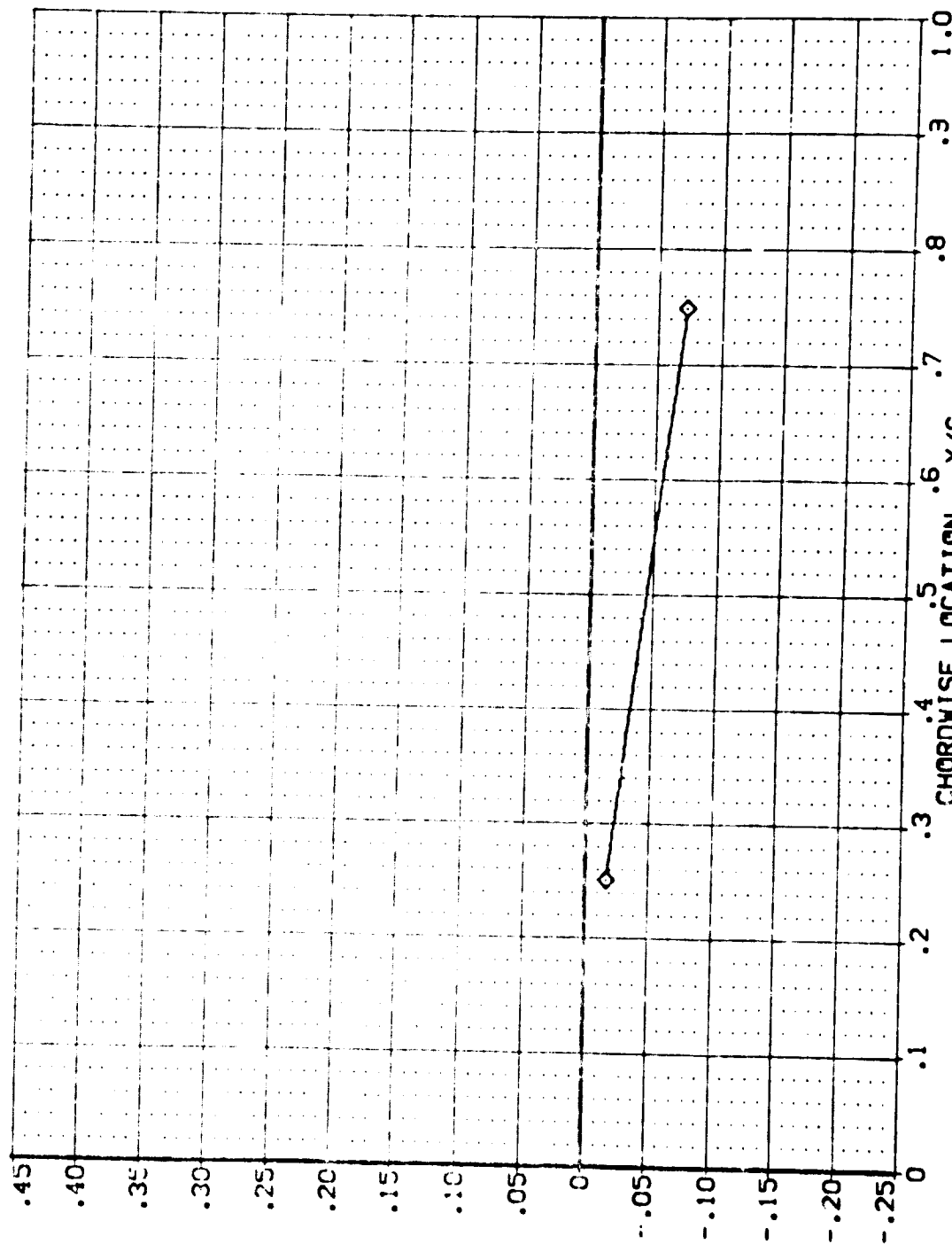
CONFIGURATION DESCRIPTION

AMES 87-710 1A12C 01 11 51 UPPER WING PRESSURE
AMES 87-710 1A12C 01 11 51 UPPER WING PRESSURE
AMES 87-710 1A12C 01 11 53 UPPER WING PRESSURE

POWER 0.000 23.860
0.000 23.860
0.000 23.860

SWPR

0.000 1.000
0.000 1.000
0.000 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

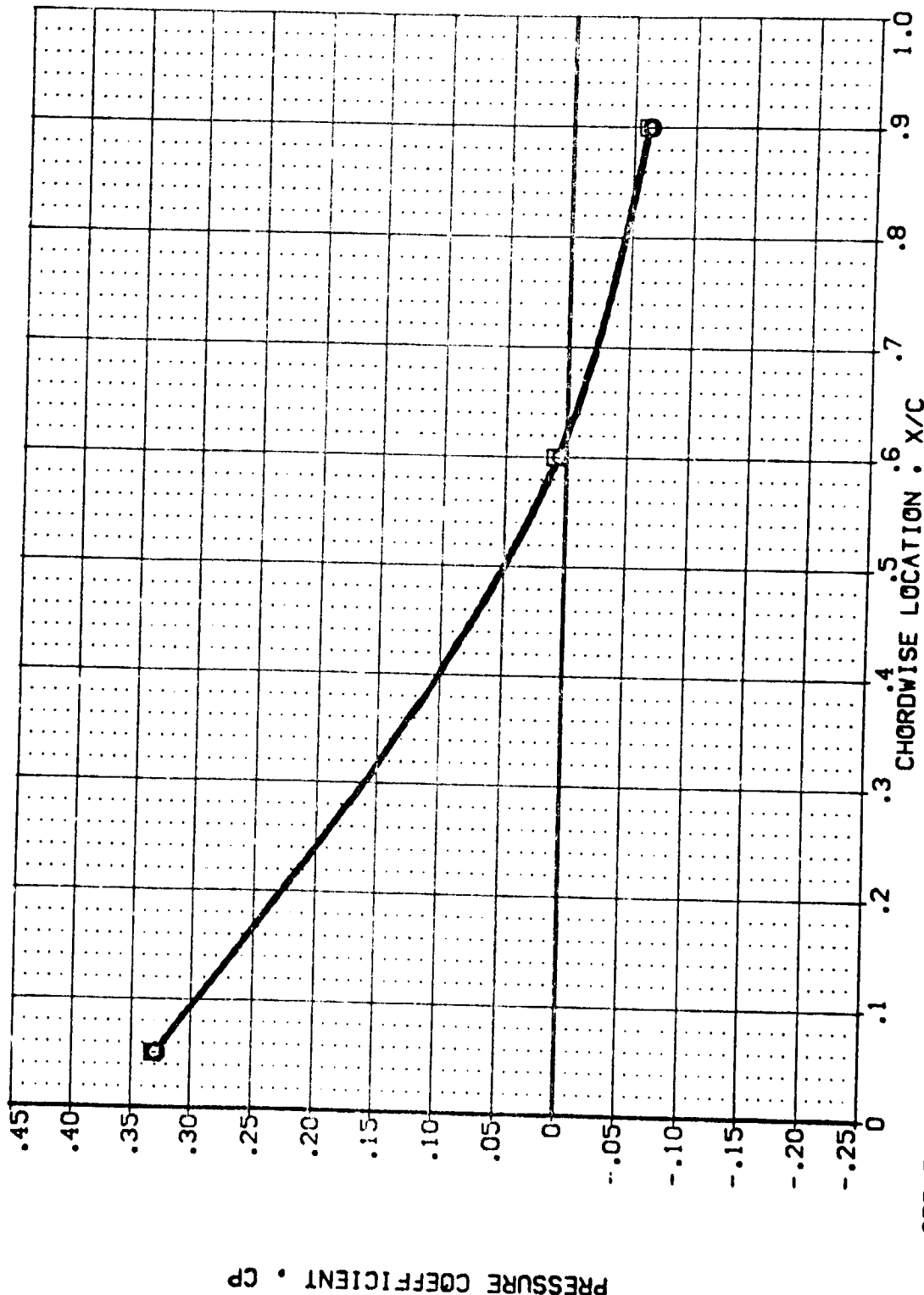
MACH = 3.500 ALPHA = .000 Y/B = .780

DATA SET SYMBOL
(UBZ046)
(UBZ050)
(UBZ112)

CONFIGURATION DESCRIPTION

AMES 87-710 IAI2C 0: T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 0: T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 0: T1 S3 UPPER WING PRESSURE

POWER 0.000
1.000
1.000
GIMBAL 1.000
1.000
1.000
DPR 23.850
23.950
82%
82%



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 0.000 Y/B = 0.887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(USZ046)
(USZ050)
(USZ112)

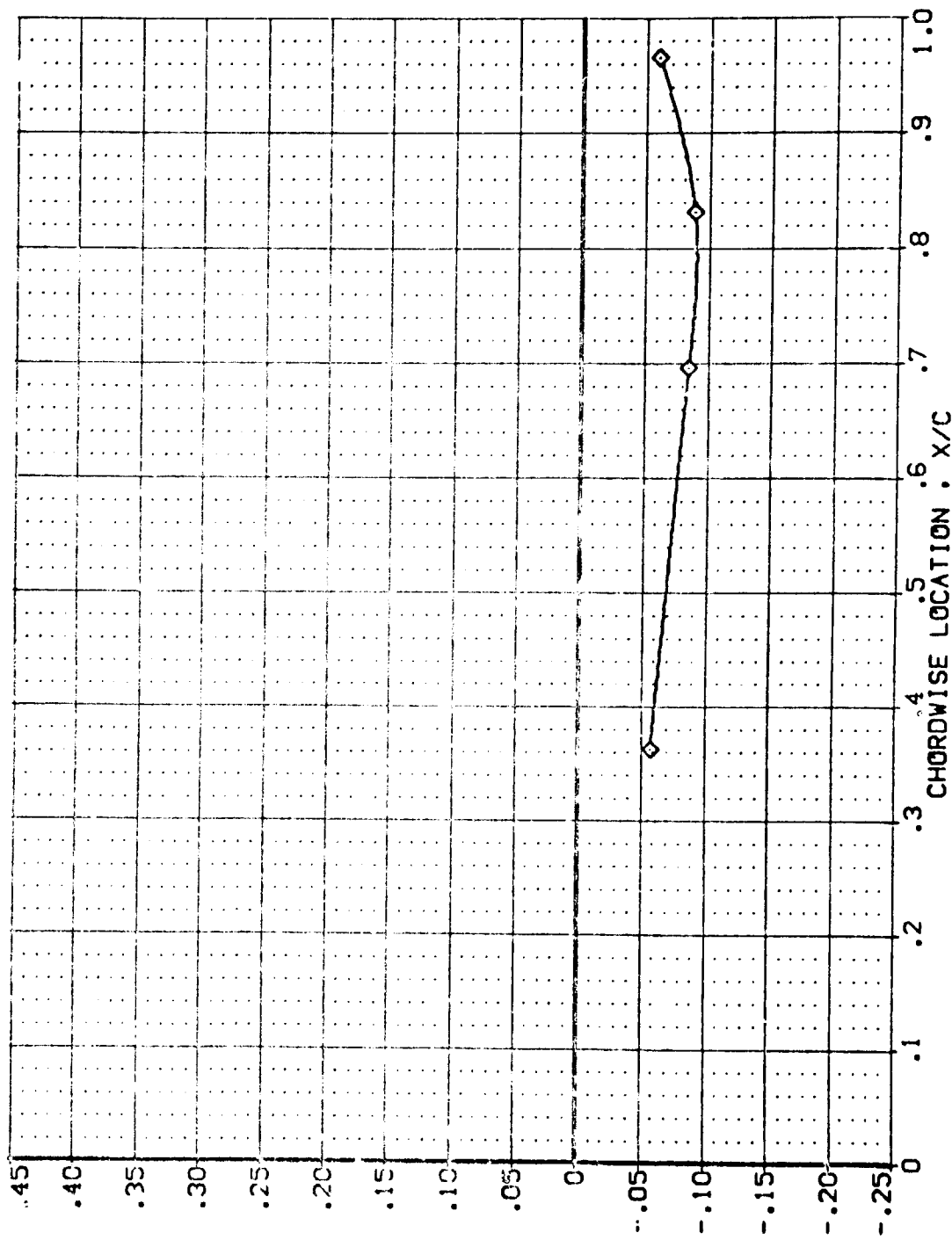
AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 01 T1 S3 UPPER WING PRESSURE

POWER .000
1.000
1.000
1.000

OPR 23.860
23.860

SRPR .826
.826

GIMBAL 1.000
1.000
1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

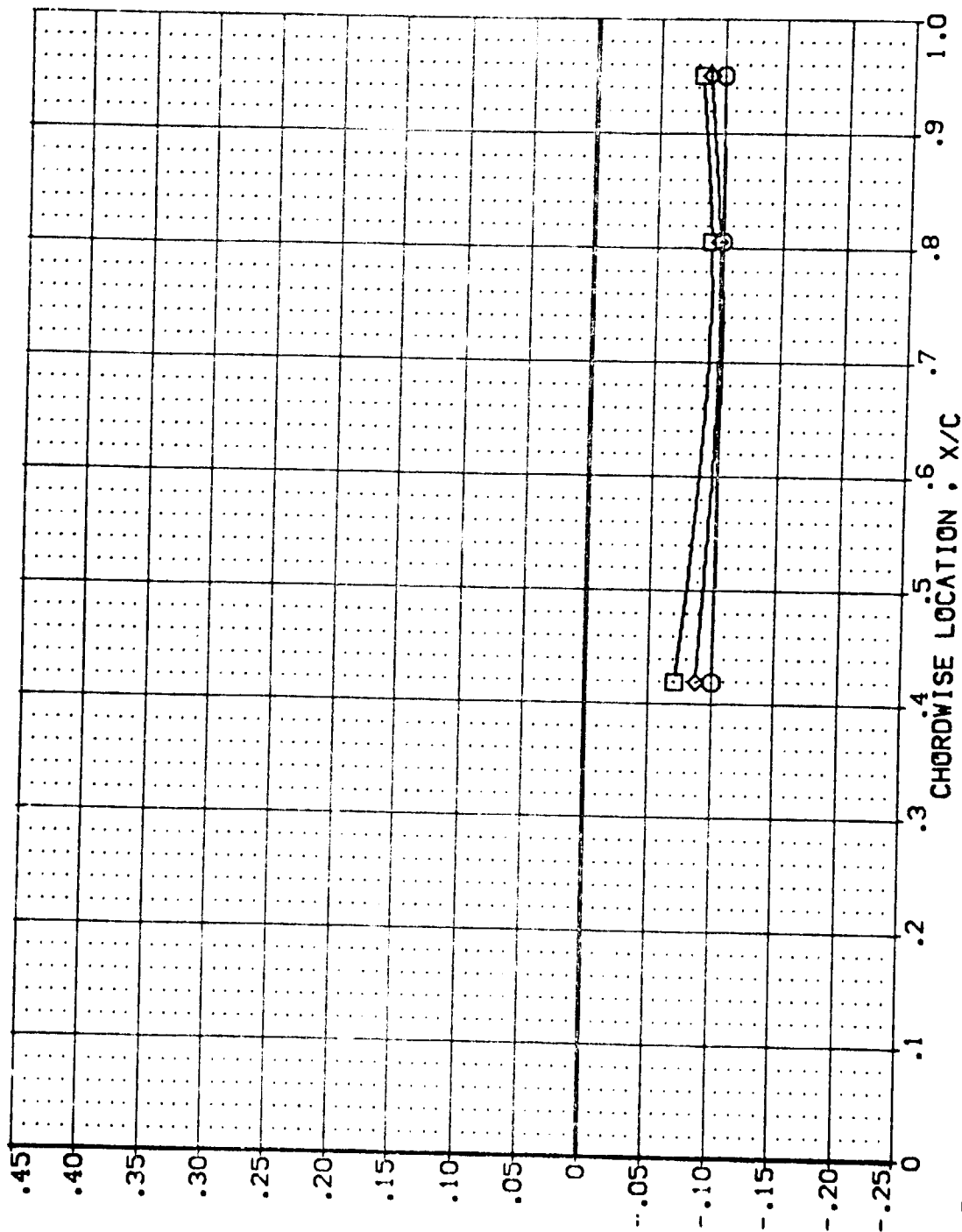
MACH = 3.500 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL

(UBZD46)
(UBZD50)
(UBZ112)

CONFIGURATION DESCRIPTION
AHES 87-710 [A] 2C 01 T1 S1 UPPER WING PRESSURE
AHES 87-710 [A] 2C 01 T1 S1 UPPER WING PRESSURE
AHES 87-710 [A] 2C 01 T1 S3 UPPER WING PRESSURE

POWER C/P R S/P R GIMBAL
.000 23.860 .826 1.000
1.000 23.860 .826 1.000
1.000 23.860 .826 1.000



PRESSURE COEFFICIENT • CP

SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .427

DATA SET SYMBOLS

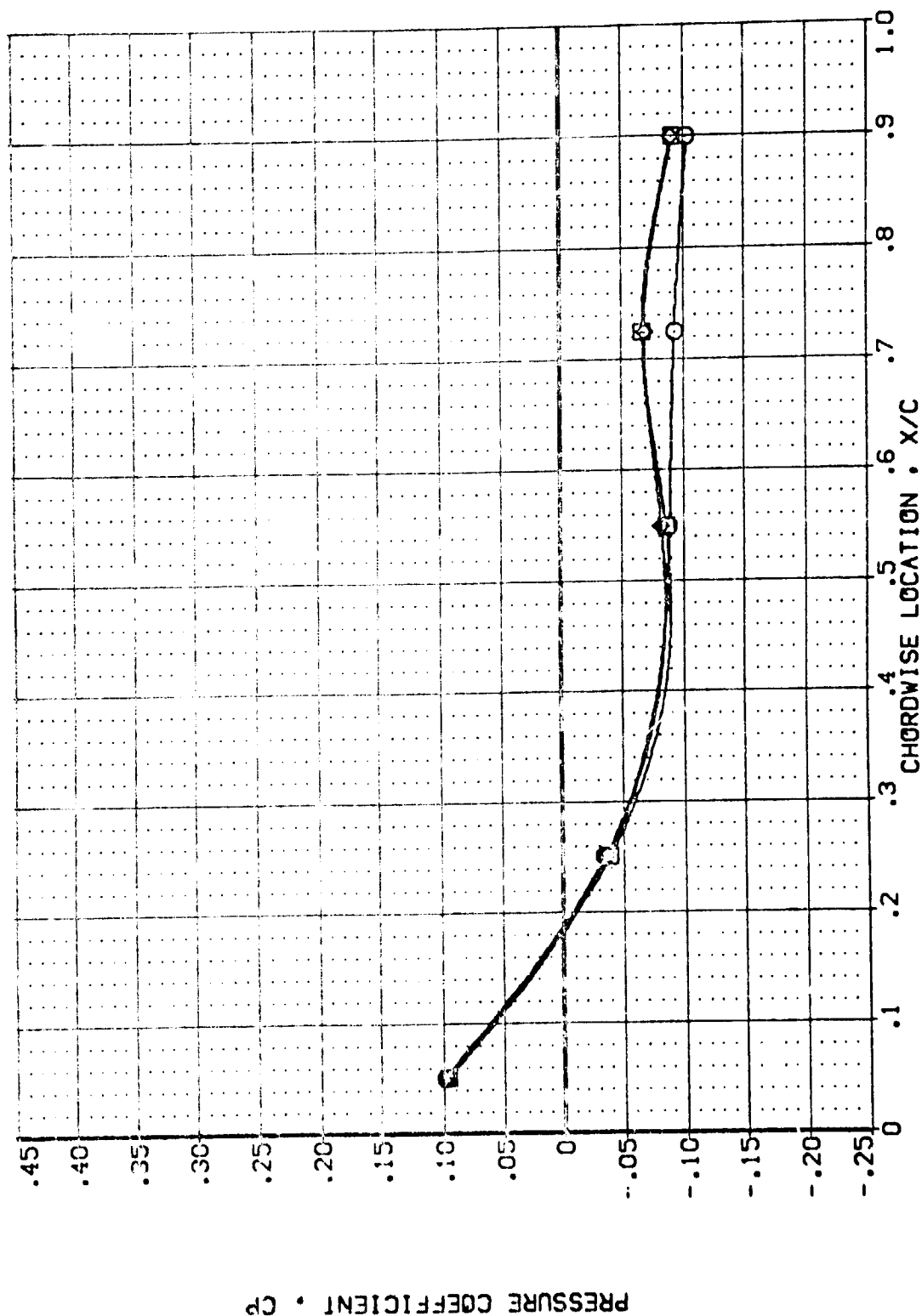
(U87045) ASES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (U87050) ASES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
 (U87112) ASES 87-710 1A12C 01 T1 S3 UPPER WING PRESSURE

POWER 0.000
 1.000
 1.000
 1.000

DFR 23.860
 23.860
 23.860

SRPR .826
 .826
 .826

GINBAL 1.000
 1.000
 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

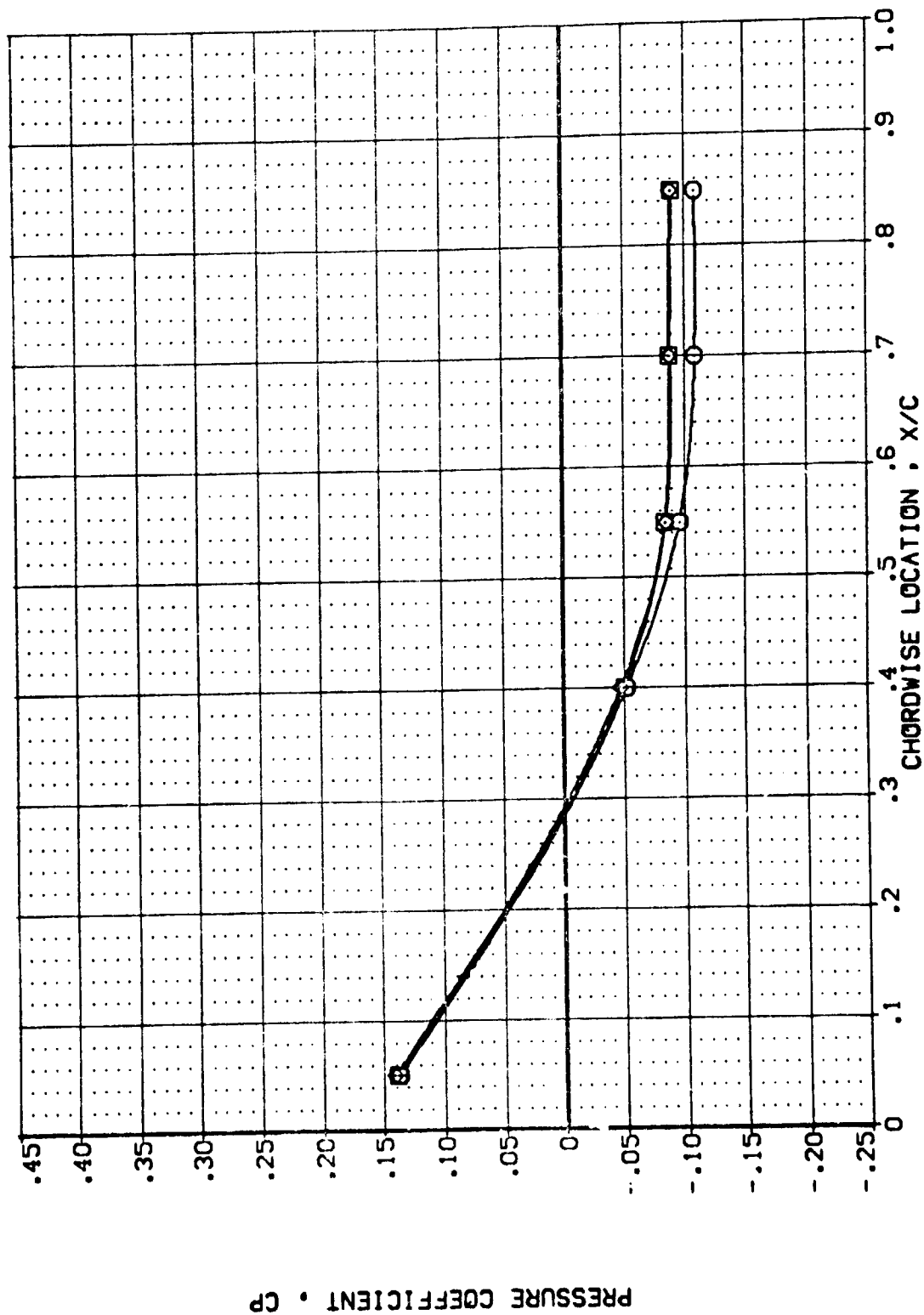
MACH = 3.500 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ045)
(LBZ050)
(LBZ112)

AHES 87-710 AI12C 01 T1 S1 UPPER WING PRESSURE
AHES 87-710 AI12C 01 T1 S1 UPPER WING PRESSURE
AHES 87-710 AI12C 01 T1 S3 UPPER WING PRESSURE

POWER Q=PR 0.000 23.860
SR=PR 1.000 .826
G/H=AL 1.000 .826



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

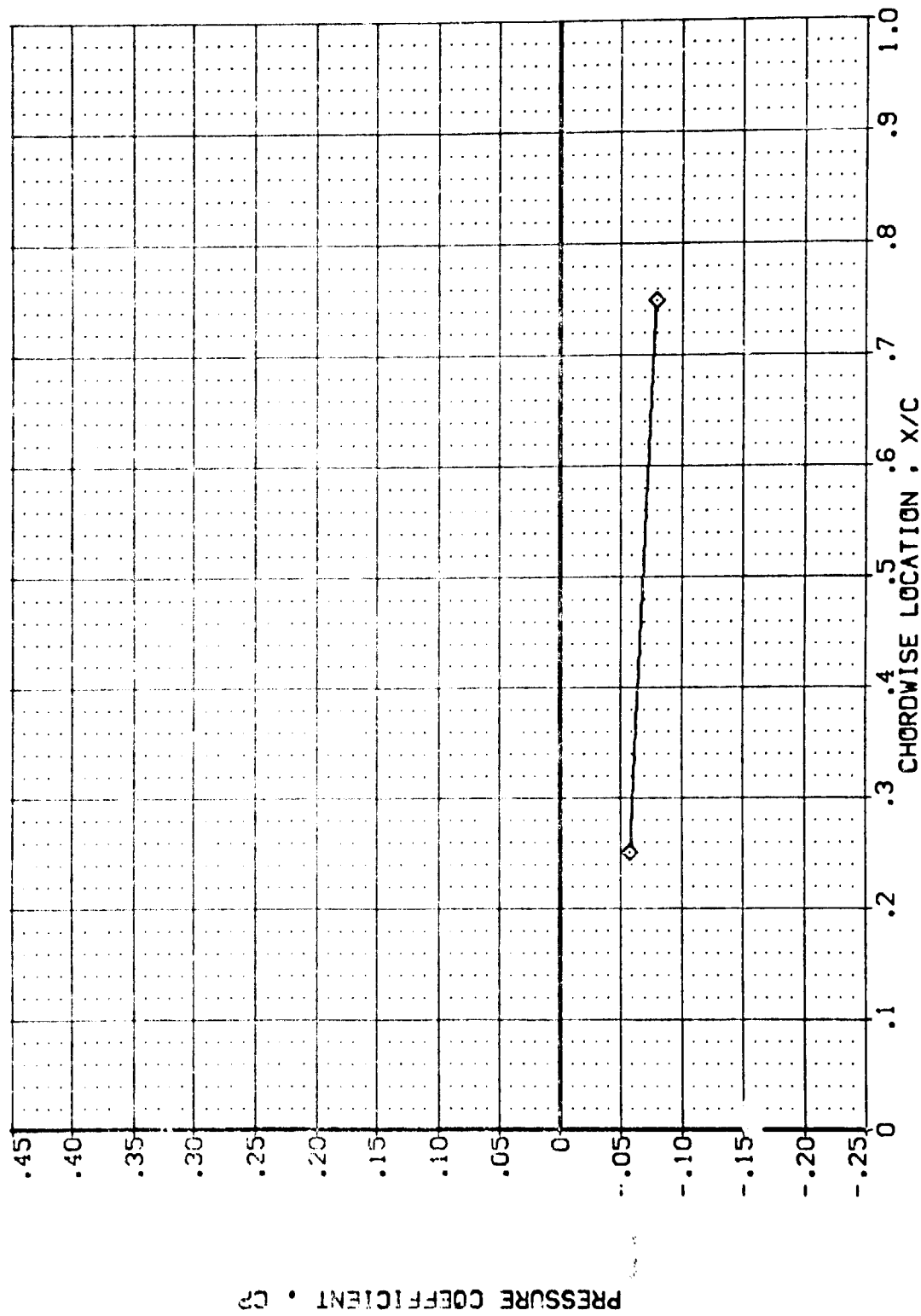
MACH = 3.500 ALPHA = 8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SWPR GIMBAL

(UB2046) ASES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE .000 23.080 .826 1.000

(UB2050) ASES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE 1.000 23.080 .826 1.000

(UB2112) ASES 87-710 IALZC 01 T1 S3 UPPER WING PRESSURE 1.000 23.080 .826 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

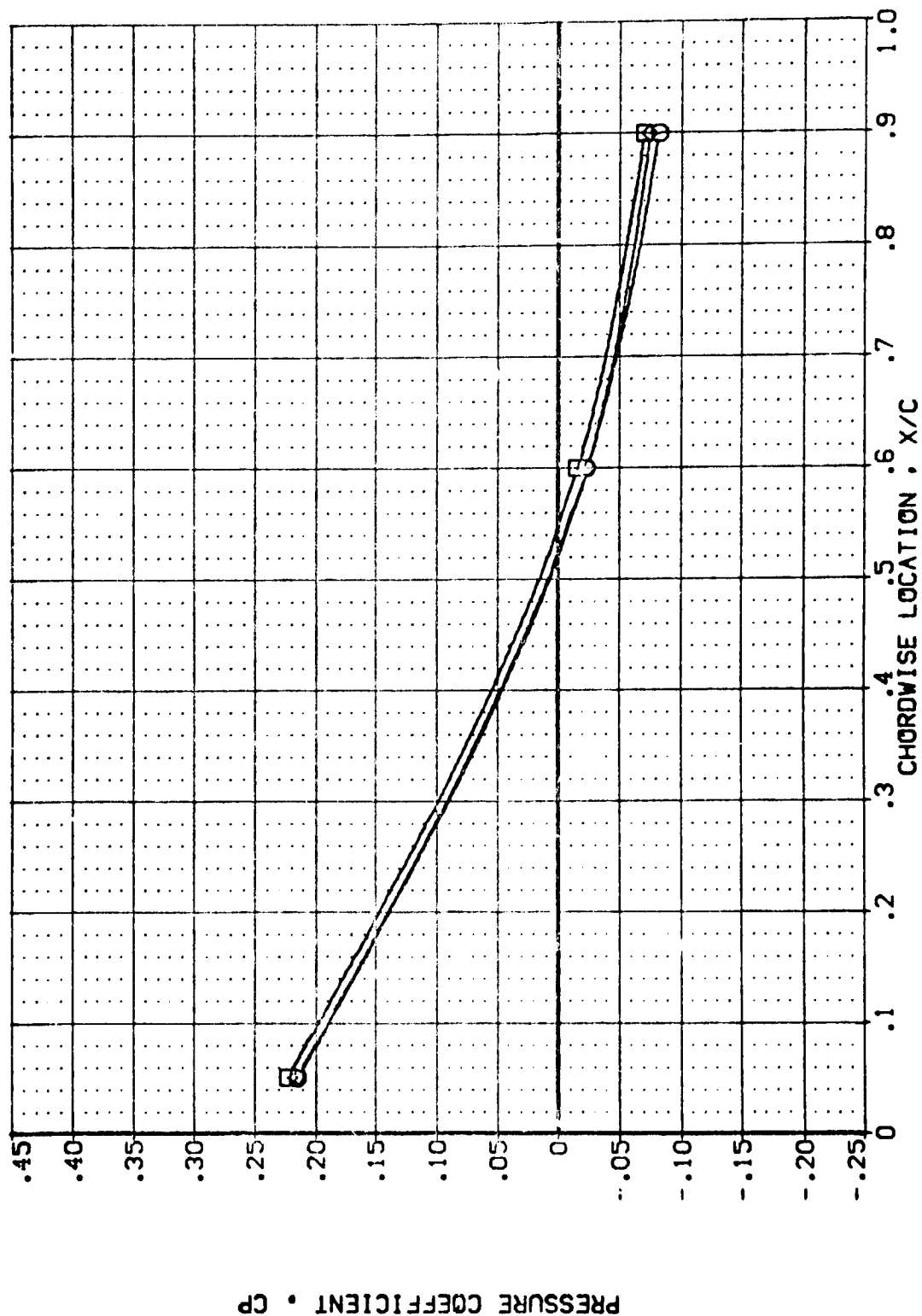
MACH = 3.500 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2046)
(UB2050)
(UB2112)

AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE
AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE
AMES 87-710 [A12C 01 T1 S3] UPPER WING PRESSURE

POWER C/PR S/P/R G/M3AL
.000 23.860 .826 1.000
1.000 23.860 .826 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING TOP

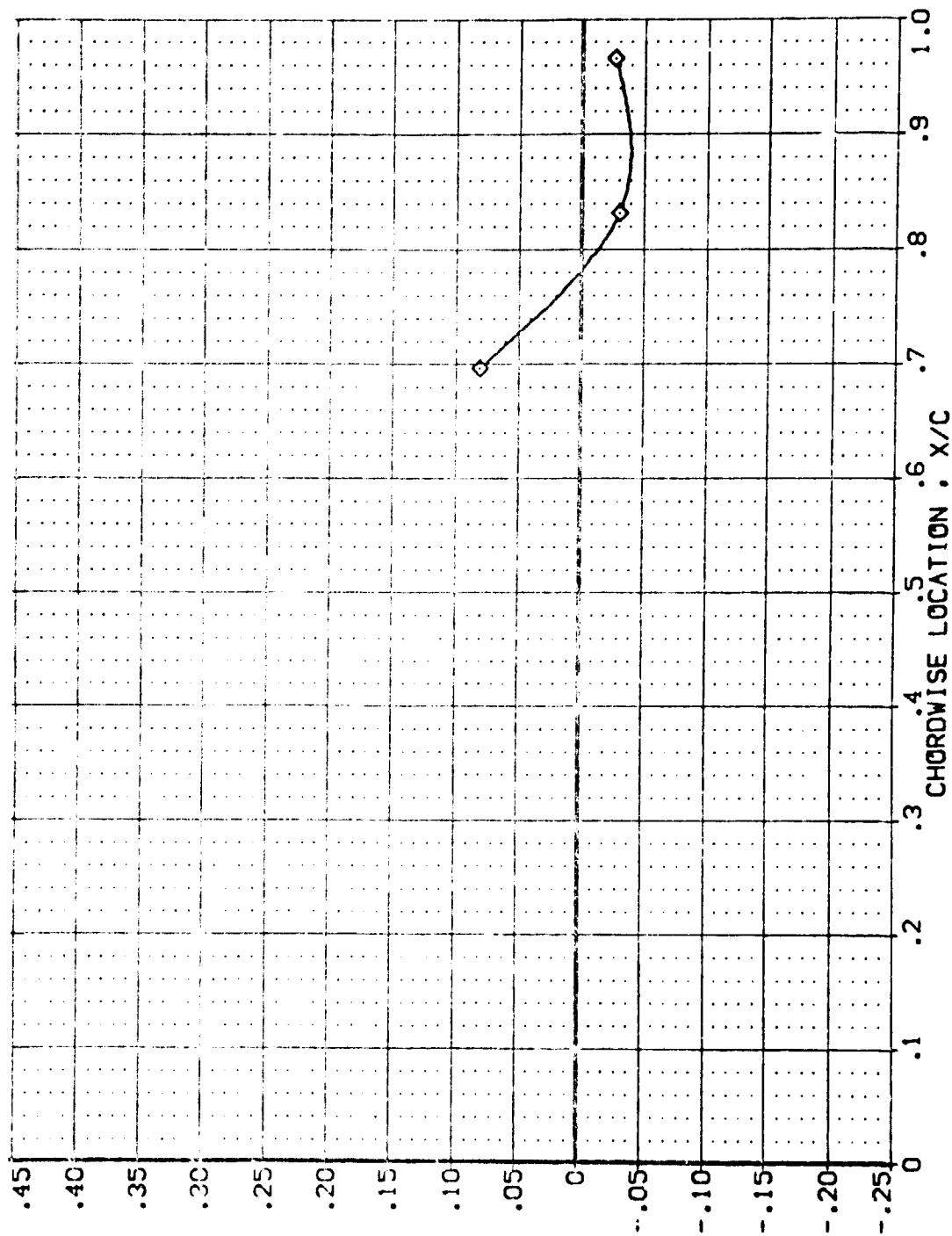
MACH = 3.500 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL

(LB2038)
(LB2041)
(LB2109)

CONFIGURATION DESCRIPTION
AVES 87-710 1A12C 01 Y1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 Y1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 Y1 S3 LOWER WING PRESSURE

POWER DCR SPRR GINBAL
.000 26.867 1.000
1.000 26.860 .768 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .299

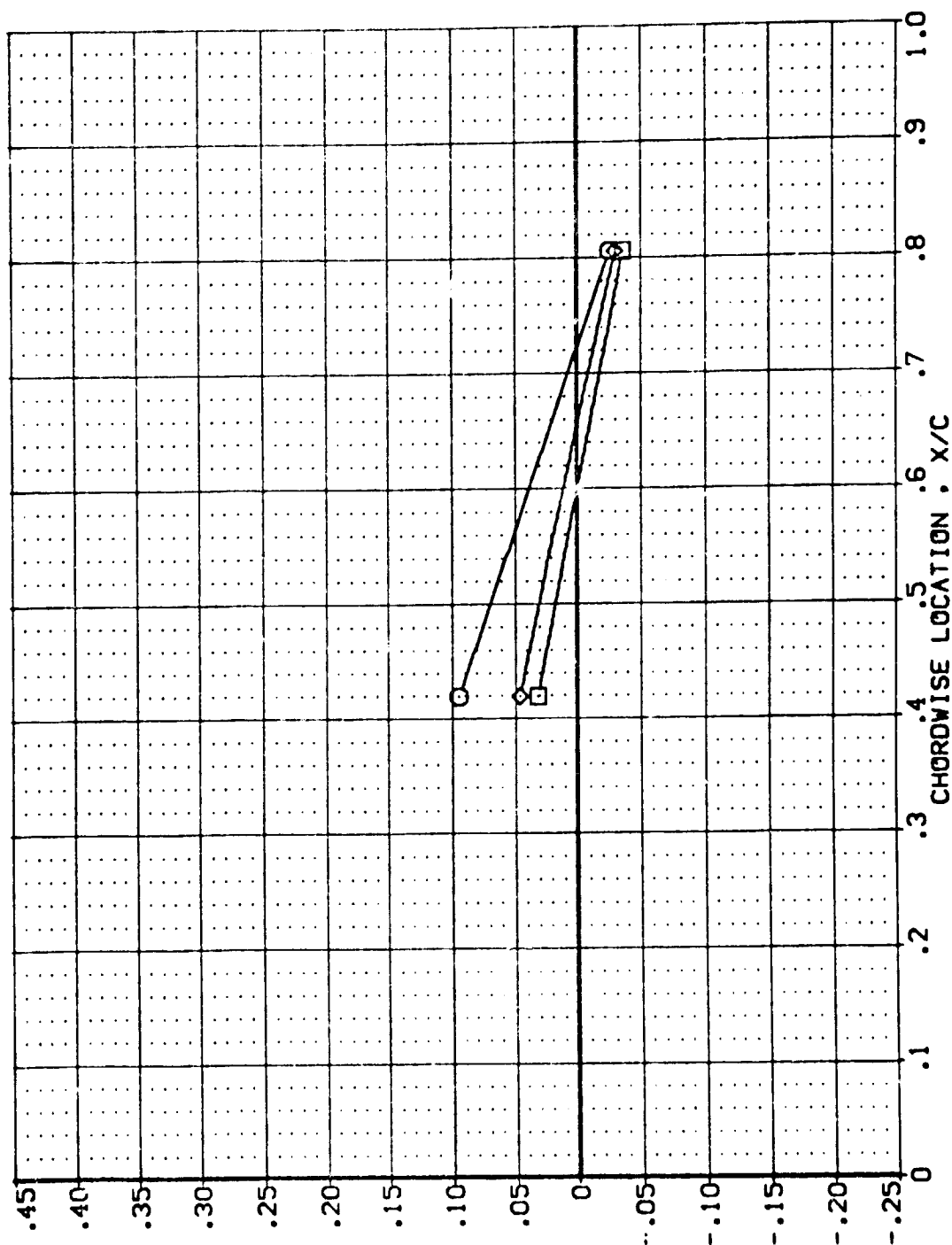
DATA SET SYMBOL

(LBZ038)
(LBZ041)
(LBZ109)

CONFIGURATION DESCRIPTION
AHES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AHES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AHES 87-710 IAI2C 01 T1 S3 LOWER WING PRESSURE

POWER C/P SRPR GIMBAL
.000
1.000 26.960
1.000 26.960
1.000 .768

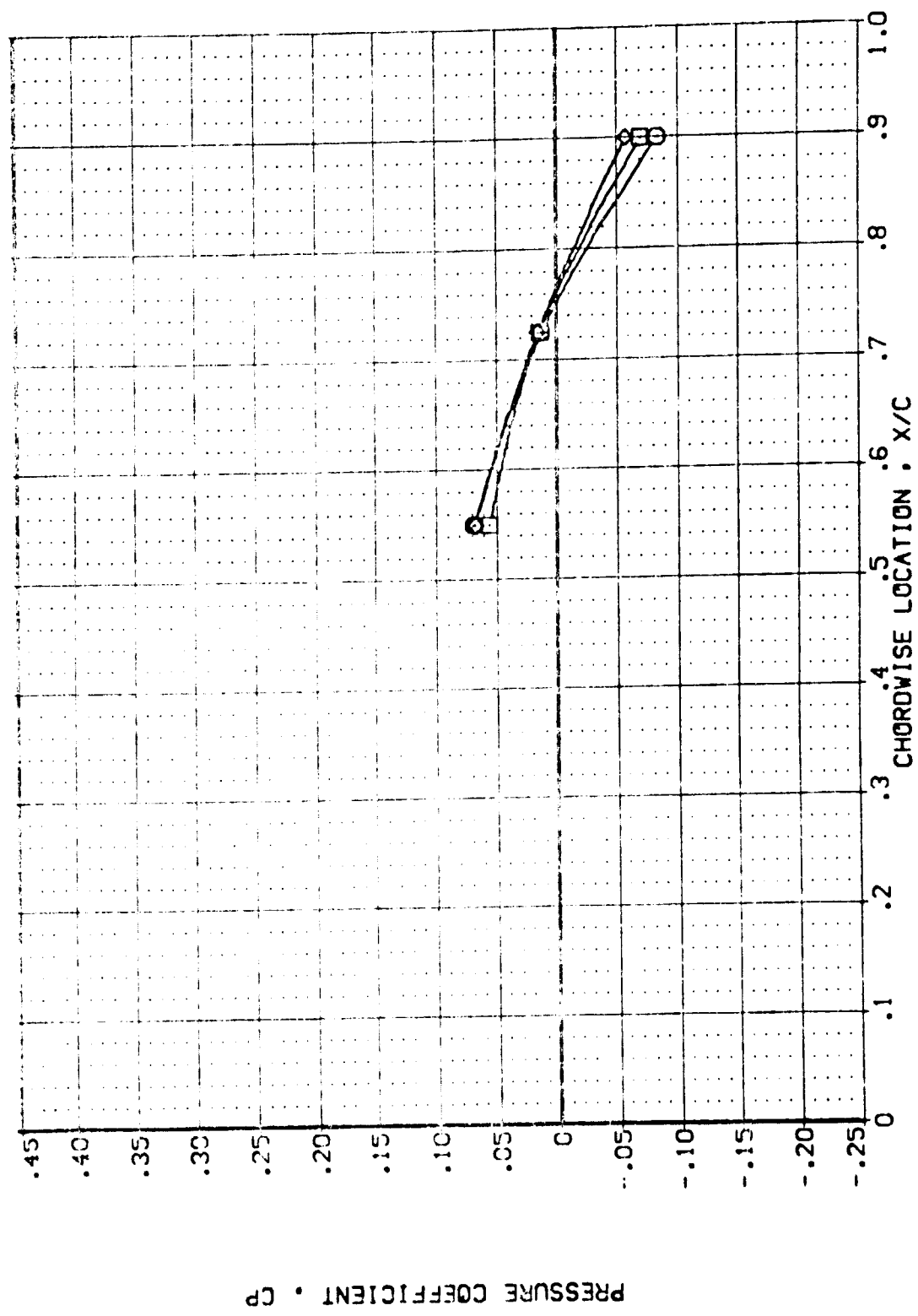
PRESSURE COEFFICIENT • CP



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SPRFR	QIMBAL
(LB2038)	AVES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LB2041)	AVES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE	1.000	26.850	.758	1.000
(LB2109)	AVES 87-710 IALZC 01 T1 S3 LOWER WING PRESSURE	1.000	26.850	.753	1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

DATA SET SYMBOL

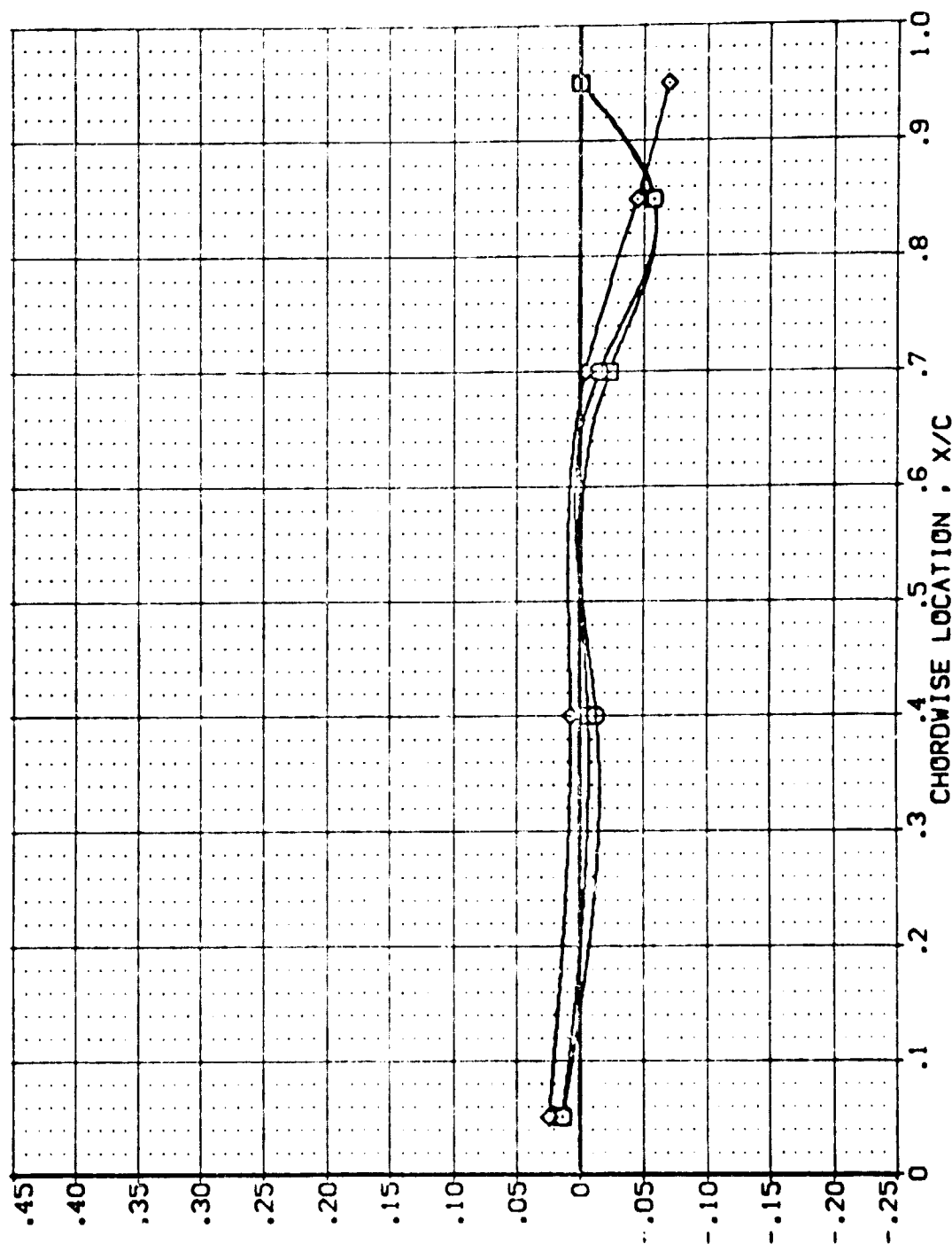
(LBZ008)
(LBZ041)
(LBZ109)

CONFIGURATION DESCRIPTION
AVES 87-710 IAI2C 01 T1 S1
AVES 87-710 IAI2C 01 T1 S1
AVES 87-710 IAI2C 01 T1 S3

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER GPR
.000 26.350
.000 26.650
1.000 26.650

SGRPR GIMBAL
1.000
1.000
1.000



PRESSURE COEFFICIENT, CP

CHORDWISE LOCATION, X/C

SR8 PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL: (L80008) (L80041) (L80109)

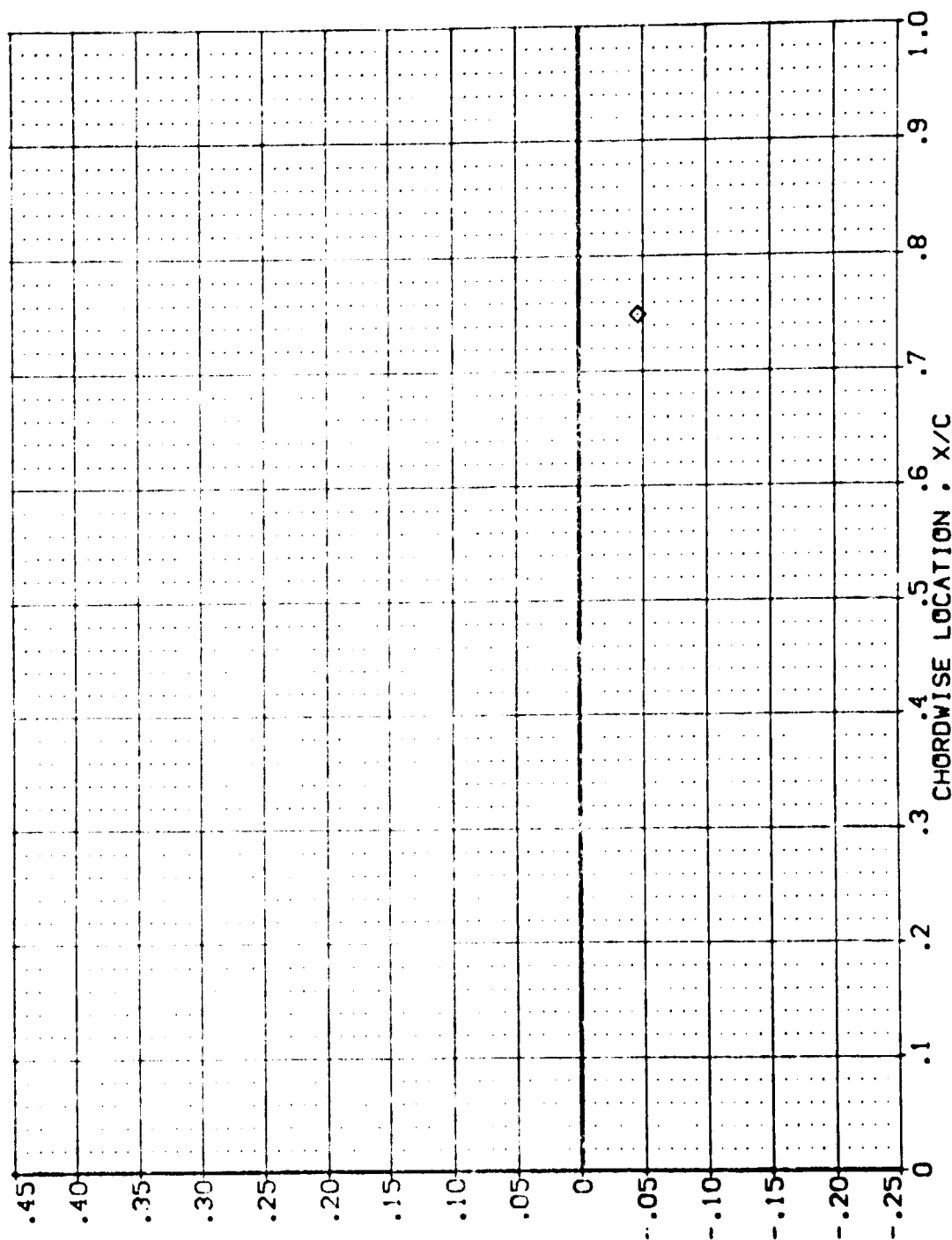
CONFIGURATION DESCRIPTION: AYES 87-710 A1ZC 01 T1 S1 LOWER WING PRESSURE
 AYES 87-710 A1ZC 01 T1 S1 LOWER WING PRESSURE
 AYES 87-710 A1ZC 01 T1 S3 LOWER WING PRESSURE

POWER: .000 1.000 1.000

OPR: 26.850 26.860

SRPR: .768 .768

GIMBAL: 1.000 1.000 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

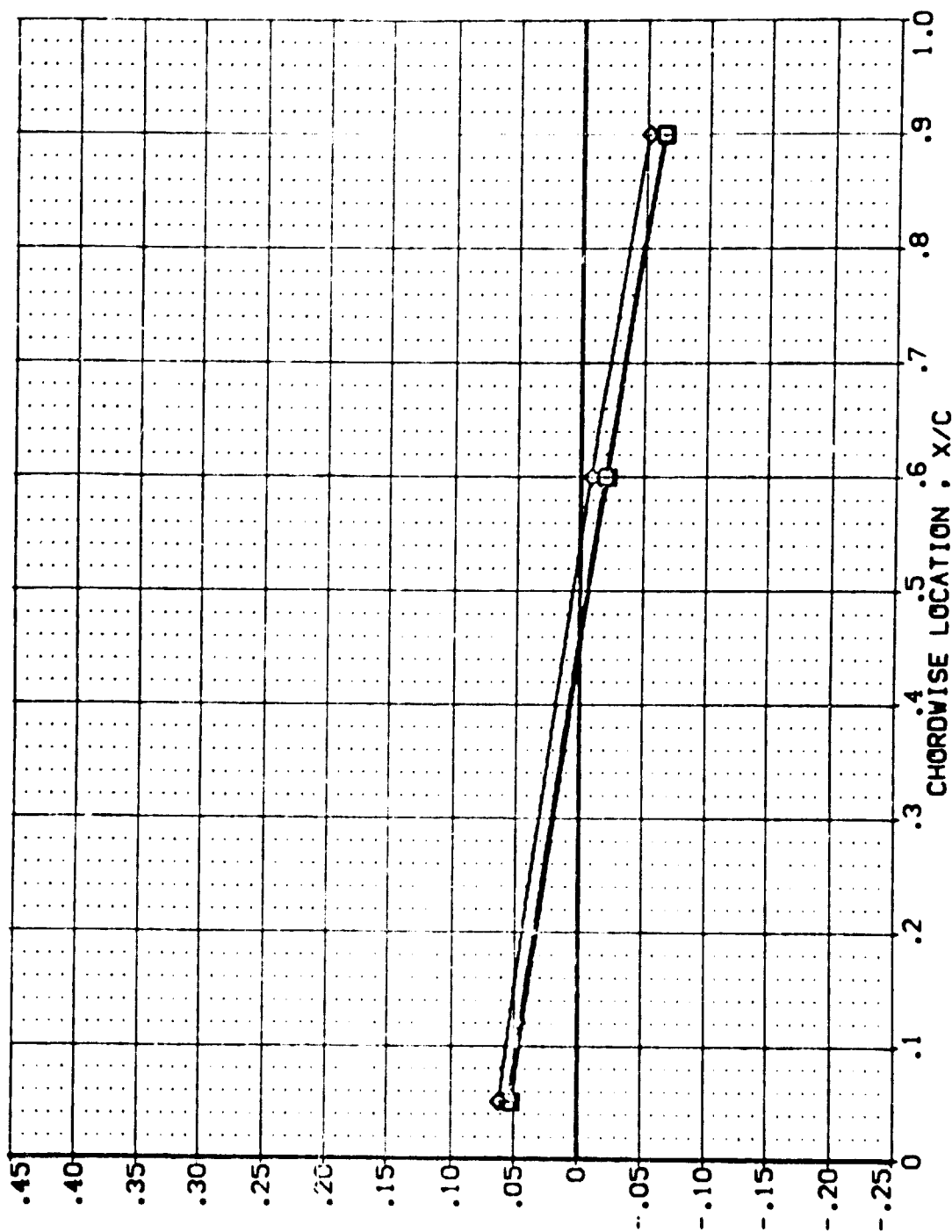
MACH = 3.000 ALPHA = -8.000 Y/B = .780 PAGE 545

DATA SET SYMBOL

(LBRZ038)
(LBRZ041)
(LBRZ109)

CONFIGURATION DESCRIPTION
AVES 87-710 [A] [Z] C [0] [1] [1] S1 LOWER WING PRESSURE
AVES 87-710 [A] [Z] C [0] [1] [1] S1 LOWER WING PRESSURE
AVES 87-710 [A] [Z] C [0] [1] [1] S3 LOWER WING PRESSURE

POWER C/P SR/FR 01/MDAL
.000 .000
1.000 26.860
1.000 26.860
.768 .768



SR8 PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

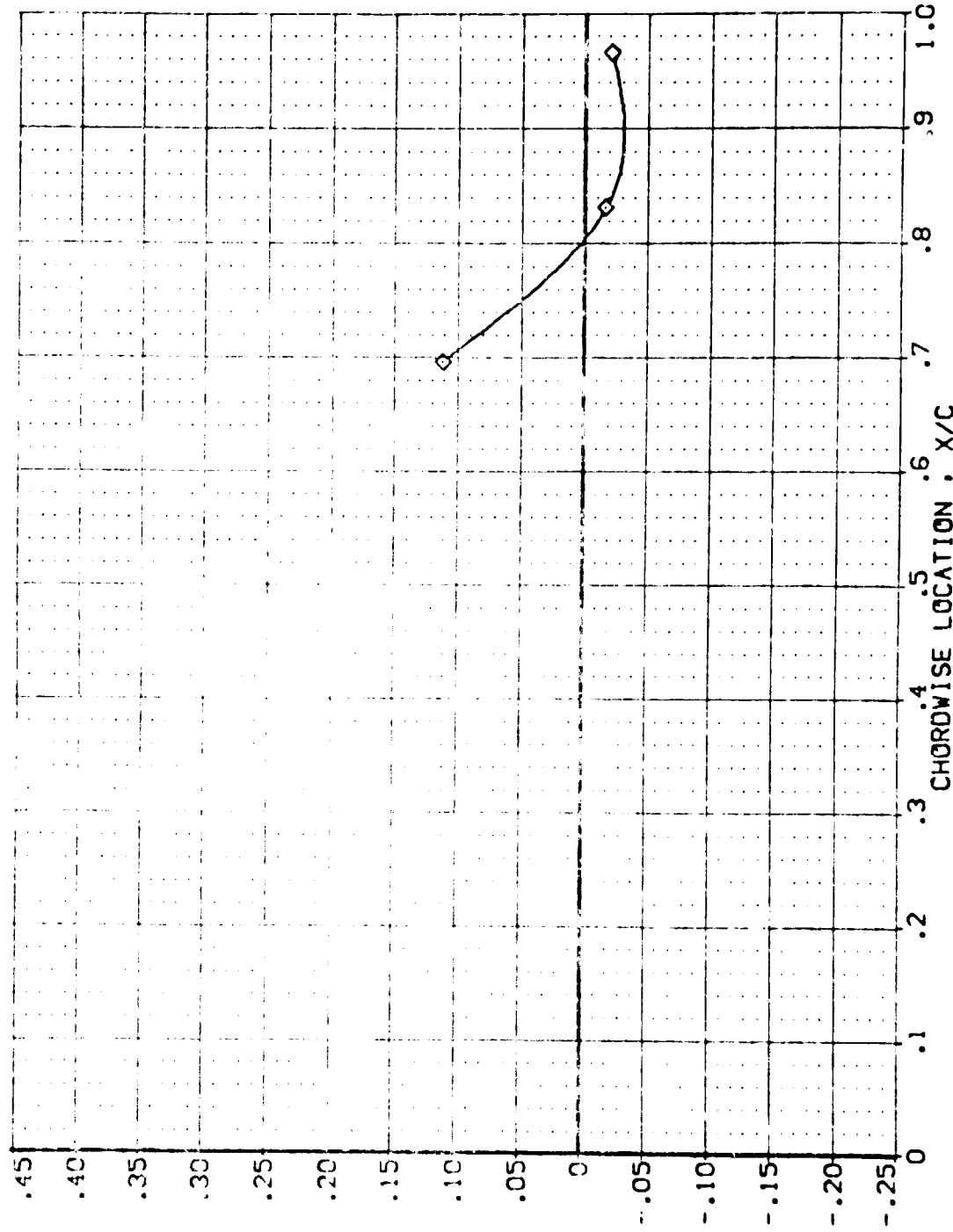
MACH = 3.000 ALPHA = -8.000 Y/B = .987

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/P/R GIMBAL

(L2100G) A-ES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE 1.000 1.000 1.000

(L2100G) A-ES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE 1.000 1.000 1.000

(L2100G) A-ES 87-710 IAL2C 01 T1 S3 LOWER WING PRESSURE 1.000 1.000 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

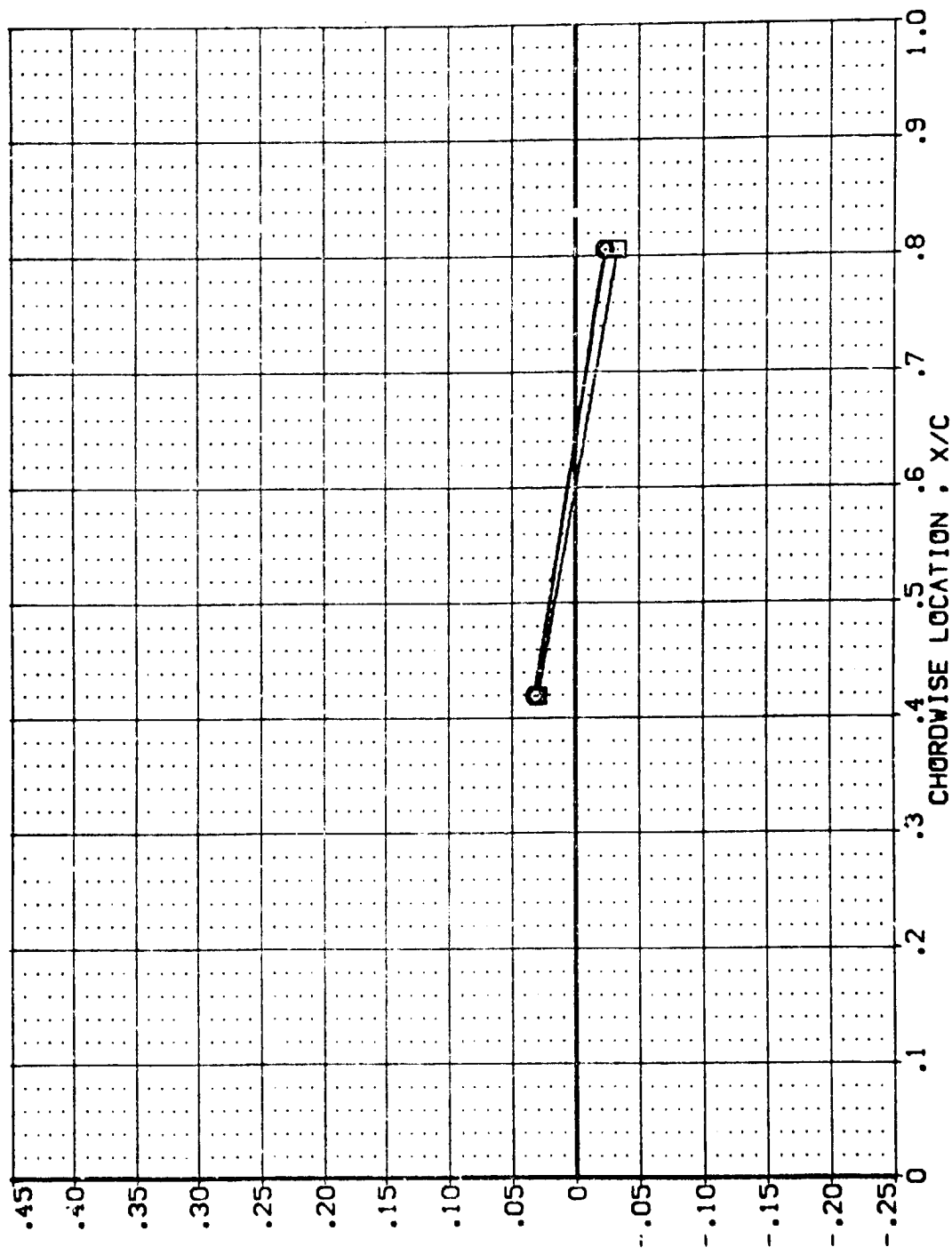
MACH = 3.000 ALPHA = .000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SMOOR GIMDAL

(LB2038) ASES 87-710 IAI2C OI T1 S1 LOWER WING PRESSURE .000 26.050 .768 1.000

(LB2041) ASES 87-710 IAI2C OI T1 S1 LOWER WING PRESSURE 1.000 26.050 .768 1.000

(LB2109) ASES 87-710 IAI2C OI T1 S3 LOWER WING PRESSURE 1.000 26.050 .768 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB2109) Q

AMES 87-710

IA12C 01 T1 S1

LOWER WING PRESSURE

POWER

1.000

QPR

26.860

SOVER

.768

G1/8AL

1.000

QPR

26.860

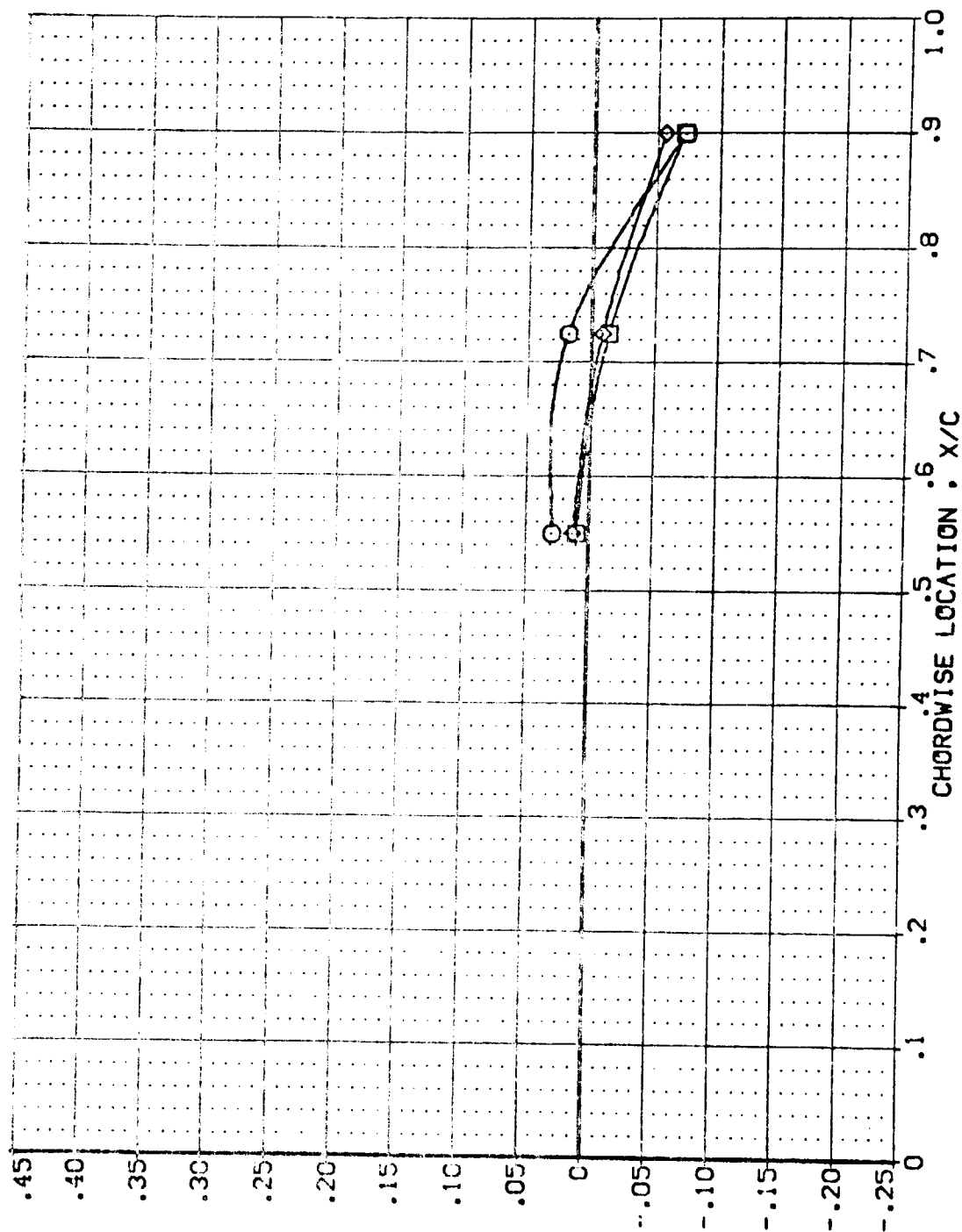
SOVER

.768

G1/8AL

1.000

PRESSURE COEFFICIENT, CP



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

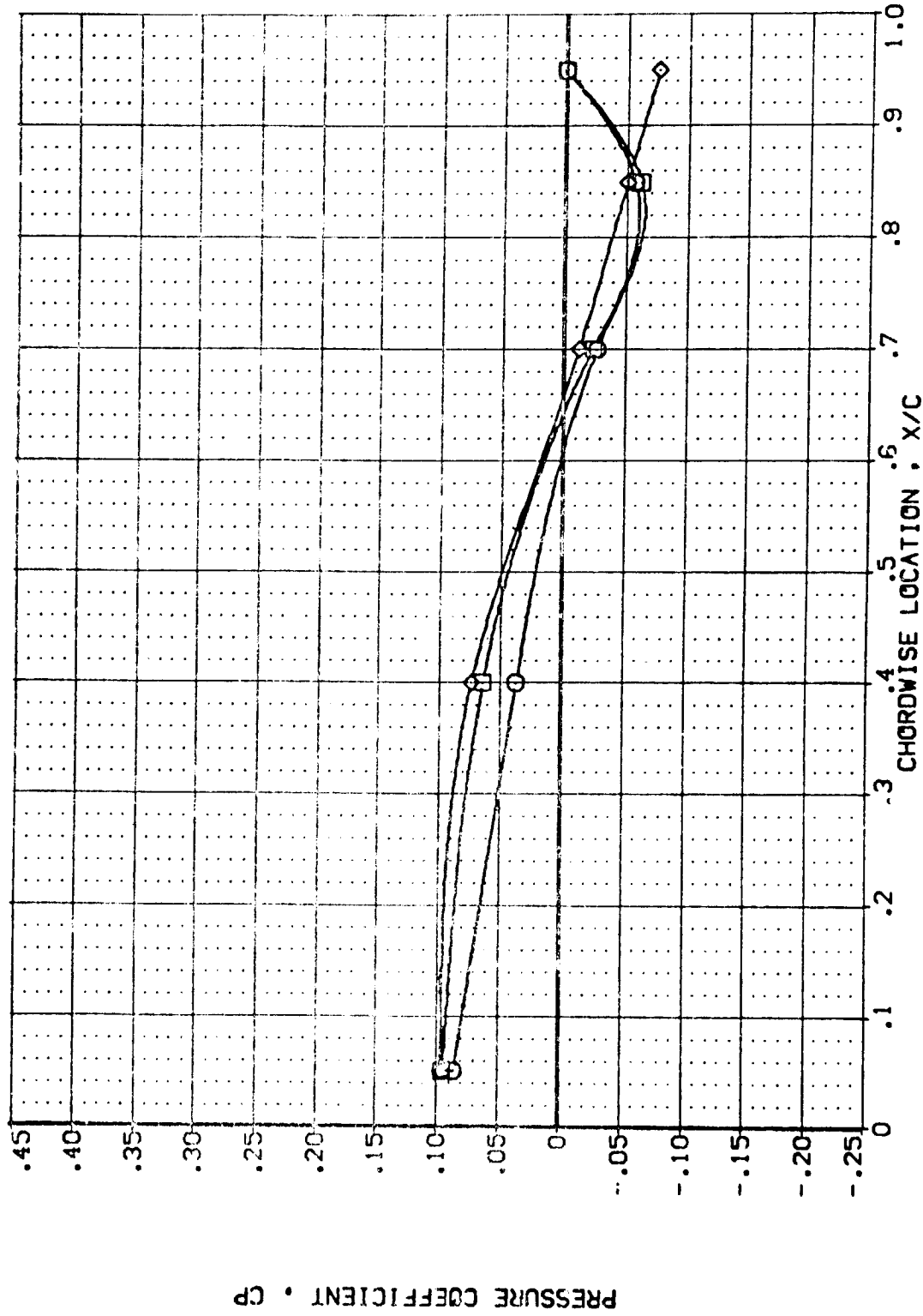
MACH = 3.000 ALPHA = 0.000 Y/B = 0.534

DATA SET 5150. CONFIGURATION DESCRIPTION

(LBZ038)
(LBZ041)
(LBZ103)

APES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
APES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
APES 87-710 1A12C 01 T1 S3 LOWER WING PRESSURE

POWER 1.000
LAR 25.000
SUPER 7.00
ORIBAL 1.000
1.000
1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

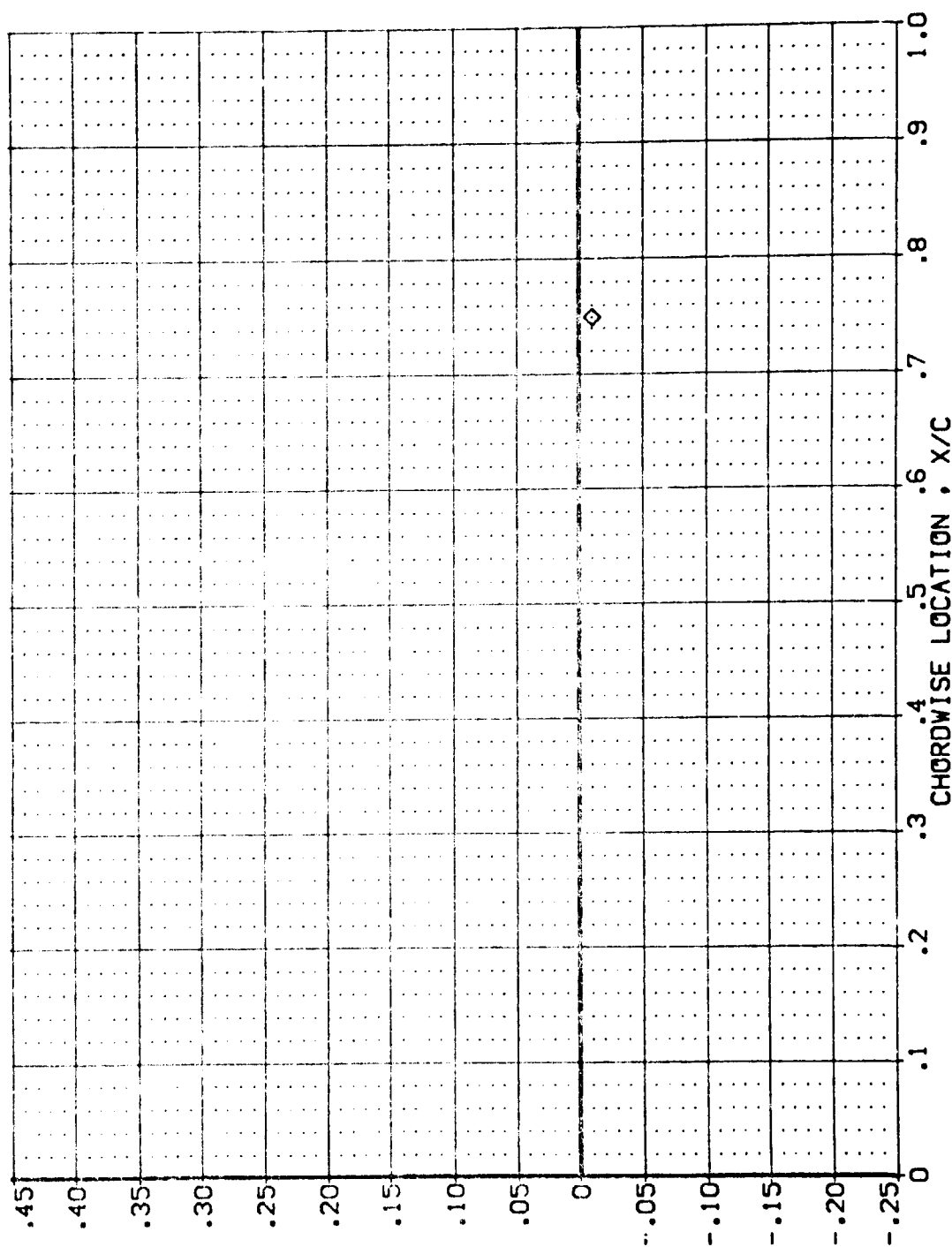
MACH = 3.000 ALPHA = 0.000 Y/B = 0.673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ038)
(LBZ041)
(LBZ109)

AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S3 LOWER WING PRESSURE

POWER CDR SR-PR G/FBAL
.000 26.860 .768 1.000
1.000 26.860 .768 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .780

DATA SET SYMBOL

(LBZ039)
(LBZ041)
(LBZ109)

CONFIGURATION DESCRIPTION

AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 1A12C 01 T1 S3 LOWER WING PRESSURE

POWER

.000
1.000
1.000

CH

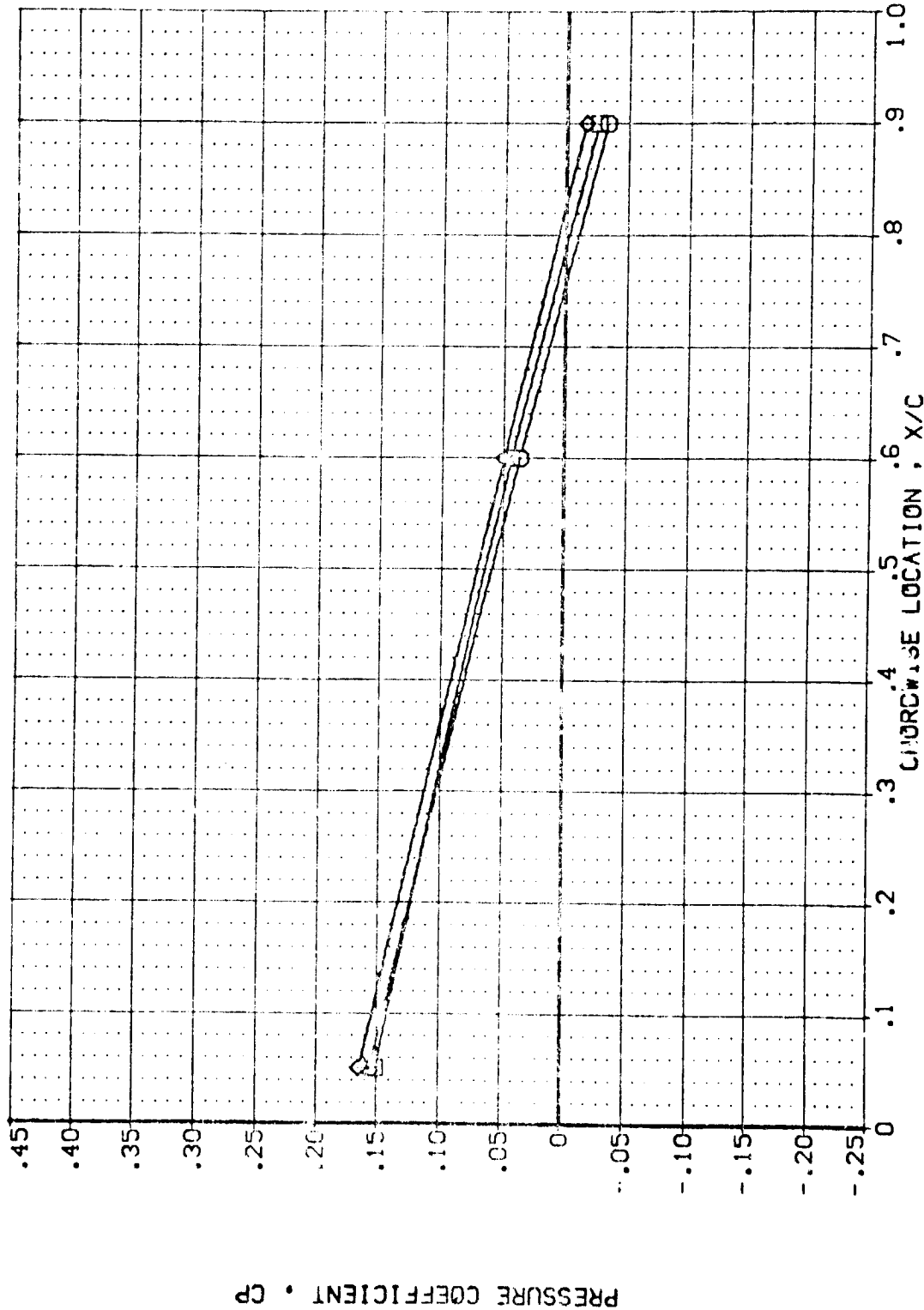
28.350
26.600

CH/PR

.758
.768

GLOBAL

1.000
1.000
1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB3008)
(LB3041)
(LB3109)

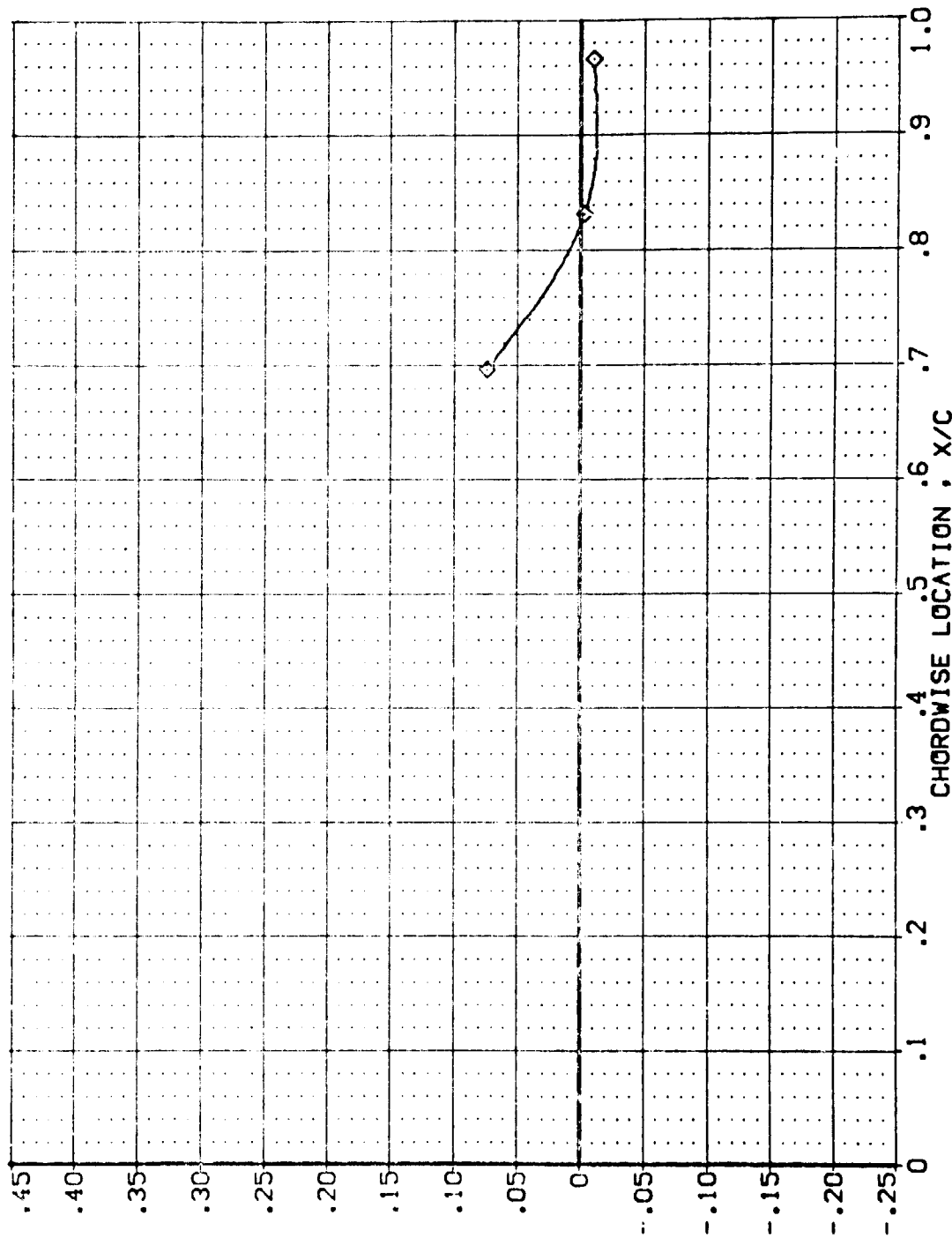
AVES 87-710
AVES 87-710
AVES 87-710

1A12C 01 T1 S1
1A12C 01 T1 S1
1A12C 01 T1 S3

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER DPR SRRR GINBAL
.000
1.000 26.860
1.000 26.850 .768
1.000

PRESSURE COEFFICIENT, CP



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 0.000 Y/B = .299

DATA SET SYMBOL: (LBZ008) (LBZ009) (LBZ010) (LBZ011) (LBZ012) (LBZ013) (LBZ014) (LBZ015) (LBZ016) (LBZ017) (LBZ018) (LBZ019) (LBZ020) (LBZ021) (LBZ022) (LBZ023) (LBZ024) (LBZ025) (LBZ026) (LBZ027) (LBZ028) (LBZ029) (LBZ030) (LBZ031) (LBZ032) (LBZ033) (LBZ034) (LBZ035) (LBZ036) (LBZ037) (LBZ038) (LBZ039) (LBZ040) (LBZ041) (LBZ042) (LBZ043) (LBZ044) (LBZ045) (LBZ046) (LBZ047) (LBZ048) (LBZ049) (LBZ050) (LBZ051) (LBZ052) (LBZ053) (LBZ054) (LBZ055) (LBZ056) (LBZ057) (LBZ058) (LBZ059) (LBZ060) (LBZ061) (LBZ062) (LBZ063) (LBZ064) (LBZ065) (LBZ066) (LBZ067) (LBZ068) (LBZ069) (LBZ070) (LBZ071) (LBZ072) (LBZ073) (LBZ074) (LBZ075) (LBZ076) (LBZ077) (LBZ078) (LBZ079) (LBZ080) (LBZ081) (LBZ082) (LBZ083) (LBZ084) (LBZ085) (LBZ086) (LBZ087) (LBZ088) (LBZ089) (LBZ090) (LBZ091) (LBZ092) (LBZ093) (LBZ094) (LBZ095) (LBZ096) (LBZ097) (LBZ098) (LBZ099) (LBZ100)

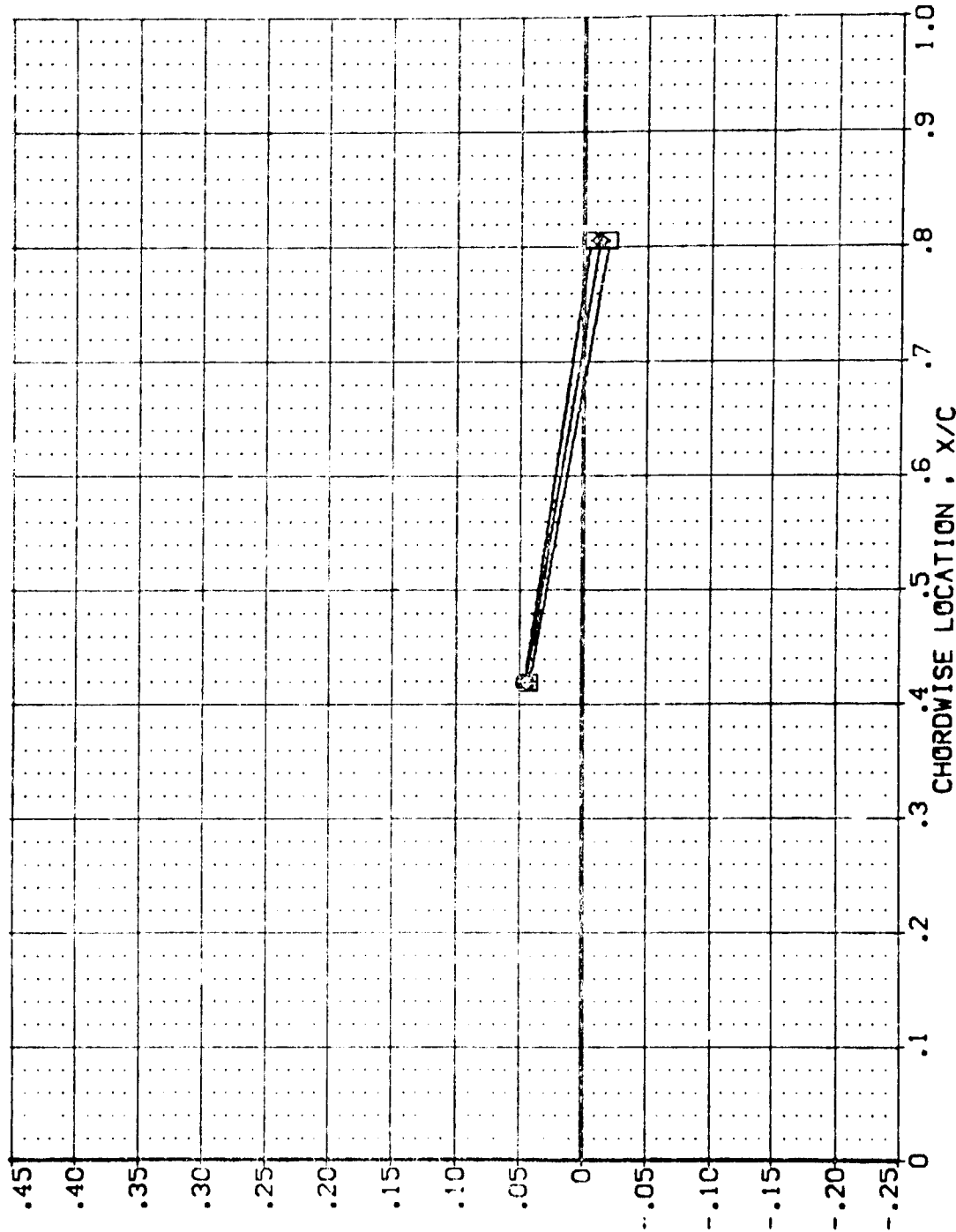
CONFIGURATION DESCRIPTION: AVES 87-710 [A12C 01 1] S1 LOWER WING PRESSURE AVES 87-710 [A12C 01 1] S1 LOWER WING PRESSURE AVES 87-710 [A12C 01 1] S3 LOWER WING PRESSURE

POWER: .000 1.000 1.000 1.000

CAR: 26.060 26.060 26.060 26.060

SWAY: .793 .793 .793 .793

GIMBAL: 1.000 1.000 1.000 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .427

PAGE 554

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(L82038)
(L82041)
(L82109)

AMES 87-710
AMES 87-710
AMES 87-710

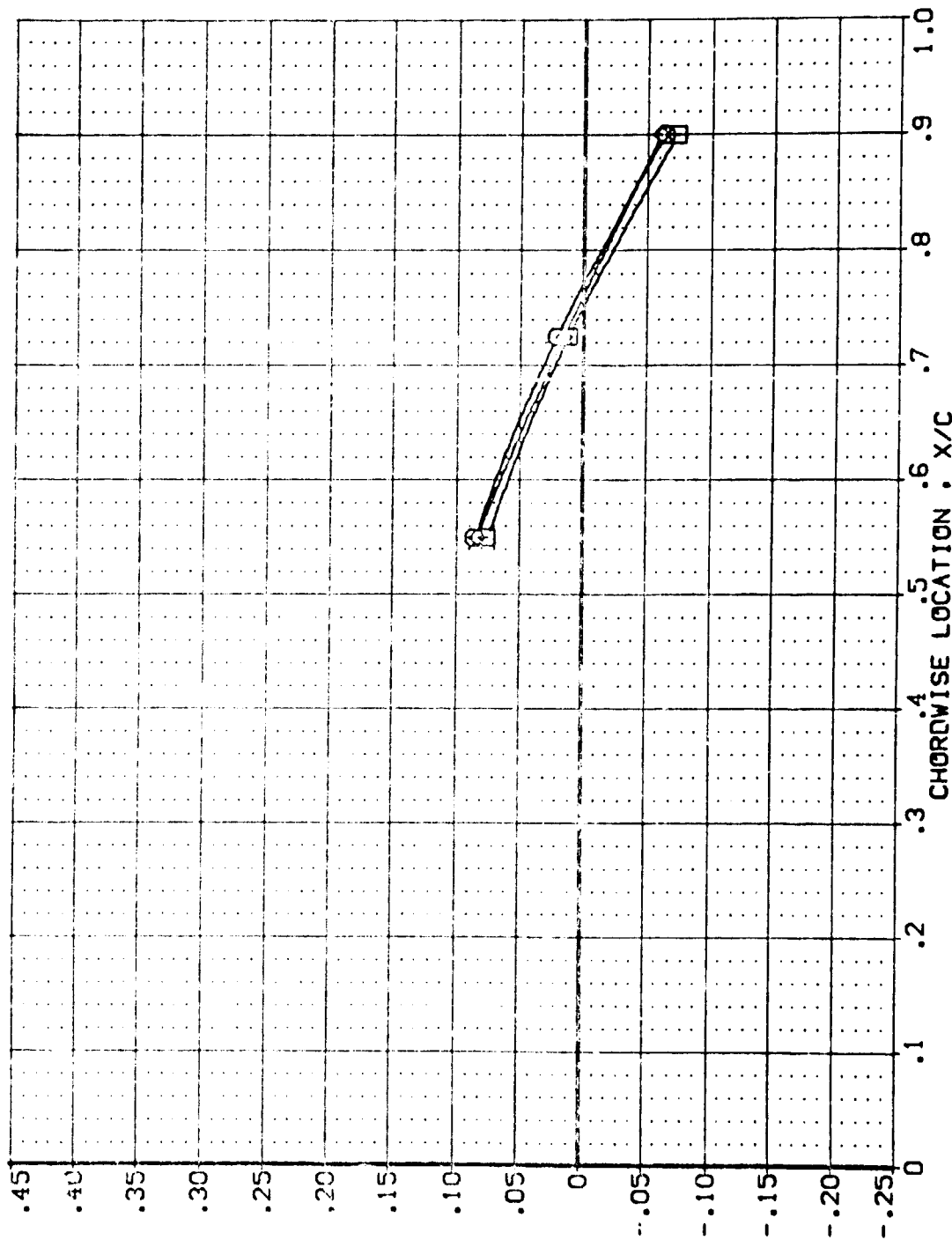
[A12C 01 T1 S1] LOWER WING PRESSURE
[A12C 01 T1 S1] LOWER WING PRESSURE
[A12C 01 T1 S3] LOWER WING PRESSURE

POWER 0.000
1.000
1.000

OPR 26.850
26.850

SR-PR .768
.768

GINBAL 1.000
1.000
1.000

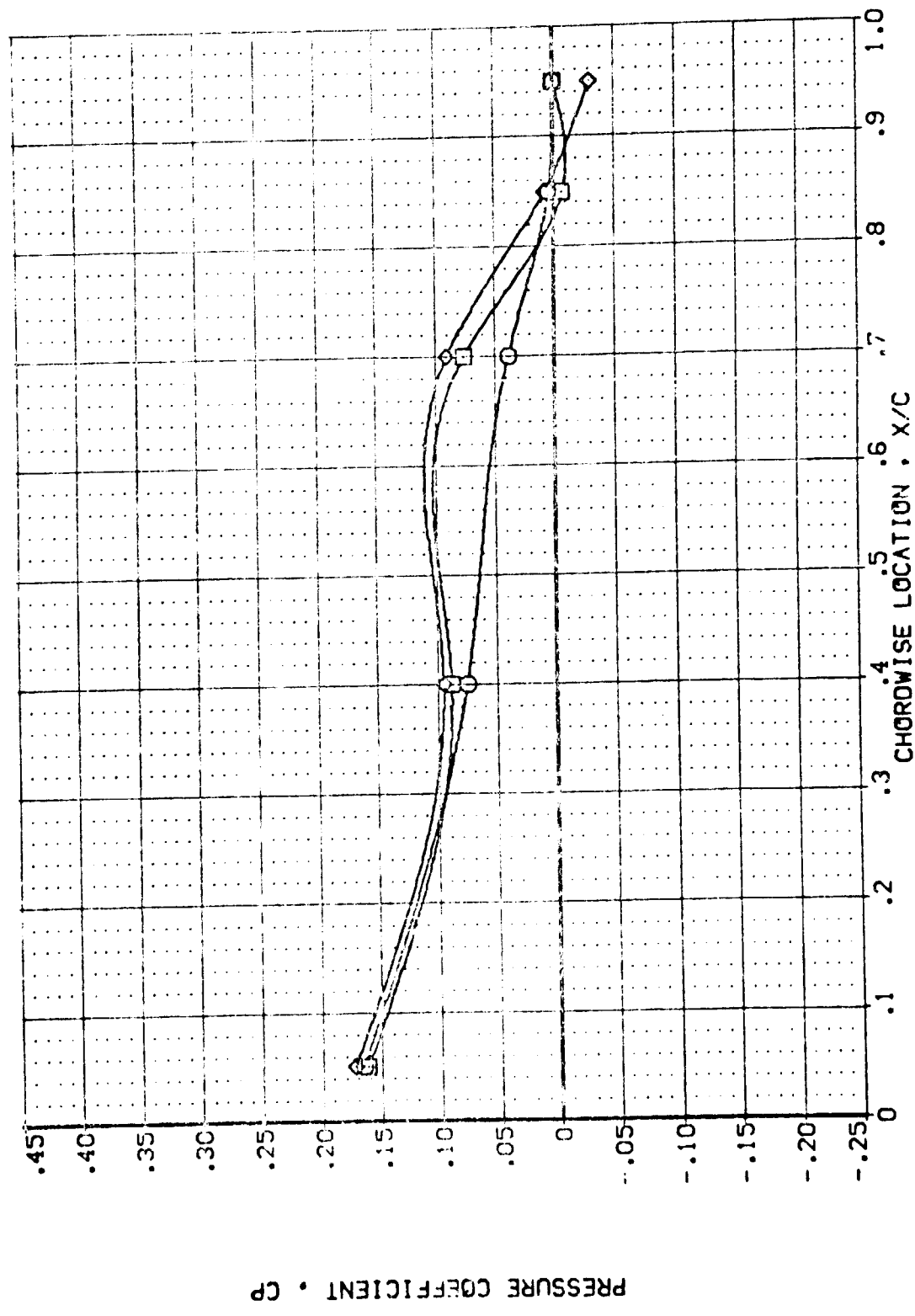


PRESSURE COEFFICIENT • CP

SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	WYN	SWYR	GLP/BAL
(LBZ038)	AVES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LBZ041)	AVES 87-710 [A]ZC 01 T1 S1 LOWER WING PRESSURE	1.000	28.000	.763	1.000
(LBZ109)	AVES 87-710 [A]ZC 01 T1 S3 LOWER WING PRESSURE	1.000	28.000	.763	1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .673

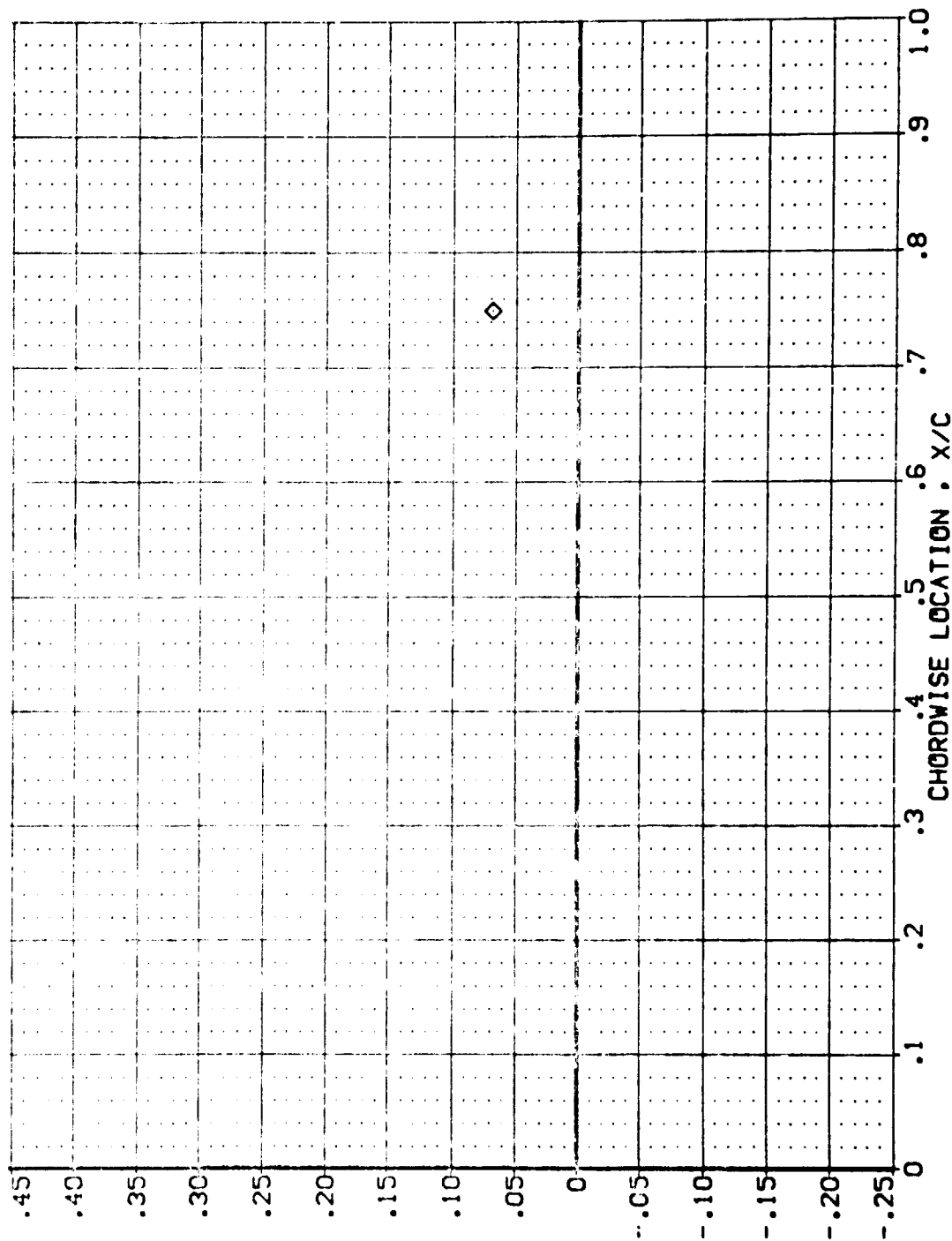
DATA SET SYMBOL

(LB2038)
(LB2041)
(LB2109)

CONFIGURATION DESCRIPTION
A/E/S 87-710 [A] [2C] 01 T1 S1 LOWER WING PRESSURE
A/E/S 87-710 [A] [2C] 01 T1 S1 LOWER WING PRESSURE
A/E/S 87-710 [A] [2C] 01 T1 S3 LOWER WING PRESSURE

POWER 0.000 26.860
1.000 26.860
GIMBAL 1.000
SR-PI 78.8
78.9

PRESSURE COEFFICIENT, CP



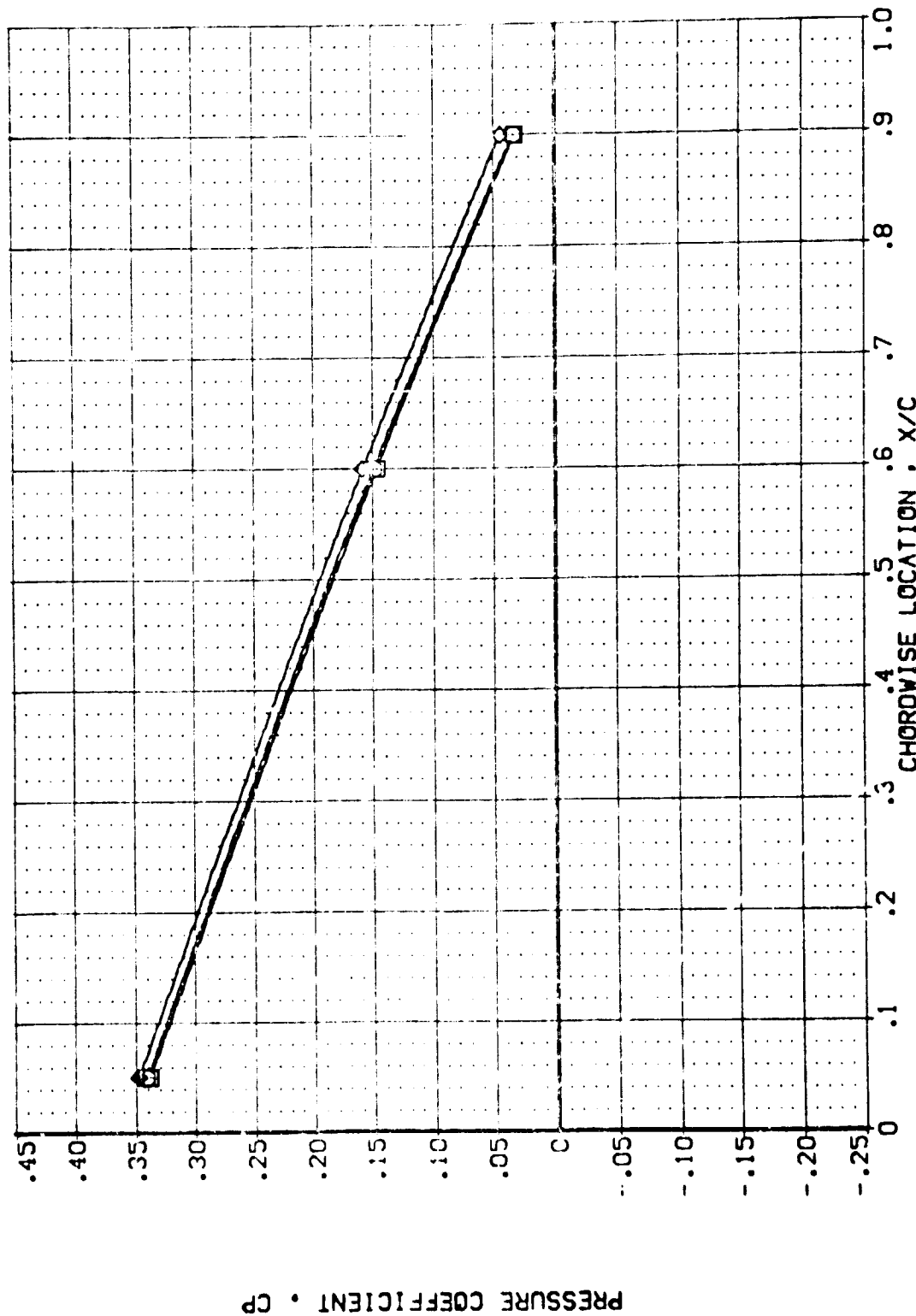
SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL
(LB008)
(LB041)
(LBZ109)

CONFIGURATION DESCRIPTION
AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S3 LOWER WING PRESSURE

POWER 6/R 520-R 61-HBAL
1.000 1.000 1.000
1.000 1.000 1.000
1.000 1.000 1.000



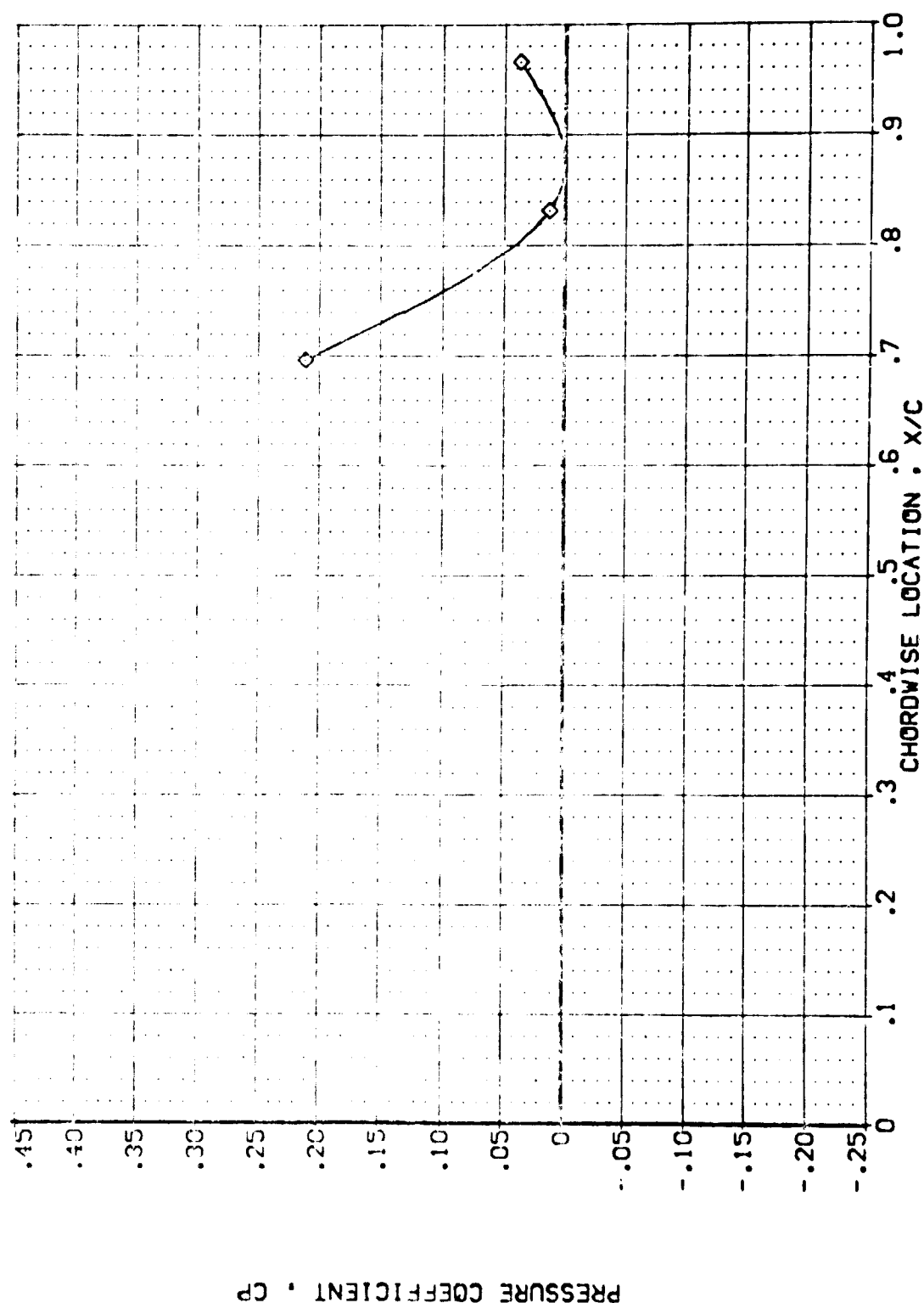
SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(L8L2046) Q AYES 87-710 1A12C 01 Y1 S1 LOWER WING PRESSURE 1.000
 (L9L2050) Q AYES 87-710 1A12C 01 Y1 S1 LOWER WING PRESSURE 1.000
 (L9L2112) Q AYES 87-710 1A12C 01 Y1 S3 LOWER WING PRESSURE 1.000

POWER DPR SR-PR GIMBAL
 .000 23.850 .825 1.000
 1.000 23.660 .825 1.000



SR8 PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

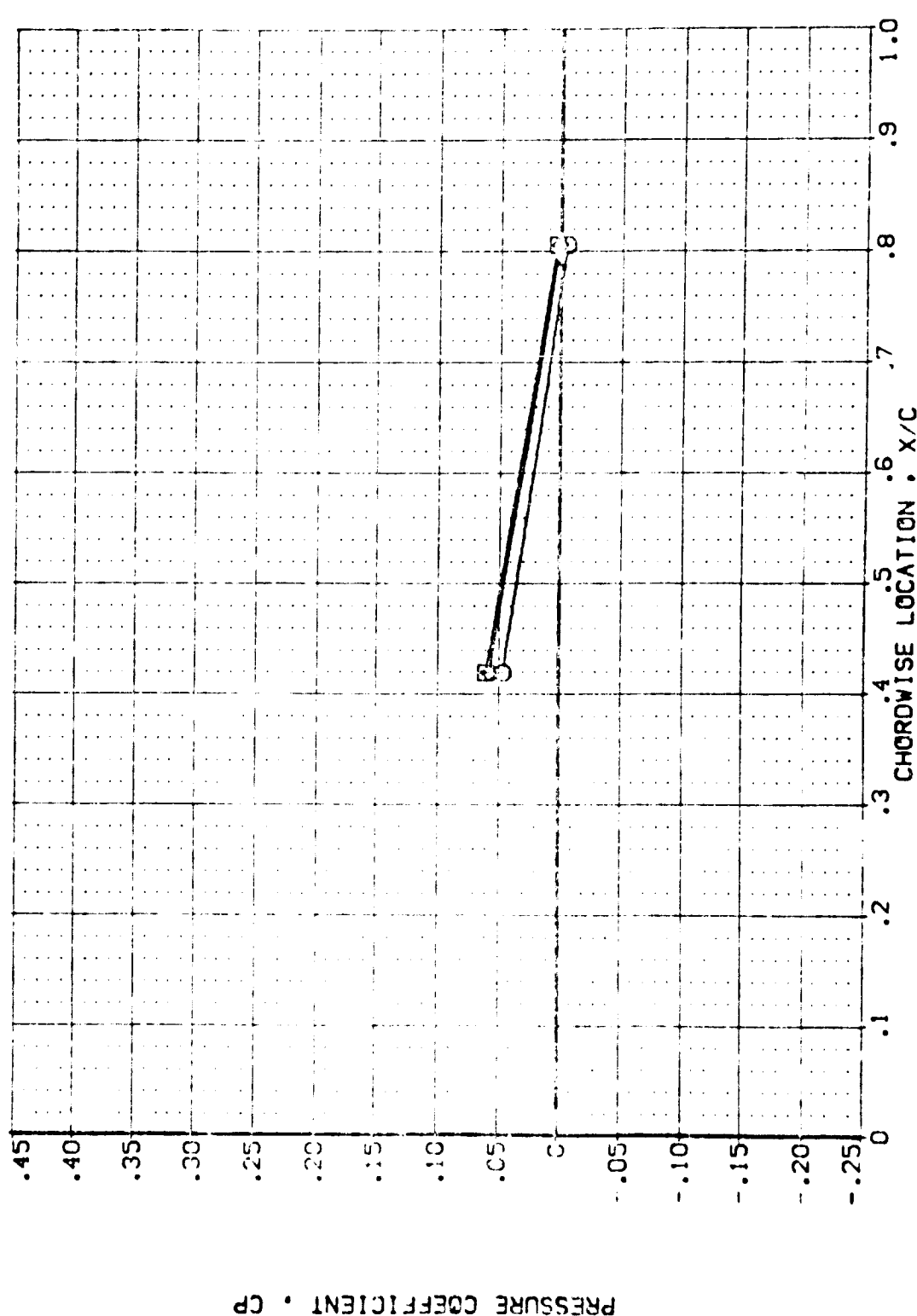
MACH = 3.500 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER DFR CHARGE SIGNAL

(LBZ046) AYES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE .000 20 0850 1.000

(LBZ050) AYES 87-710 [A] 2C 01 T1 S1 LOWER WING PRESSURE 1.000 20 0850 1.000

(LBZ112) AYES 87-710 [A] 2C 01 T1 S3 LOWER WING PRESSURE 1.000 20 0850 1.000

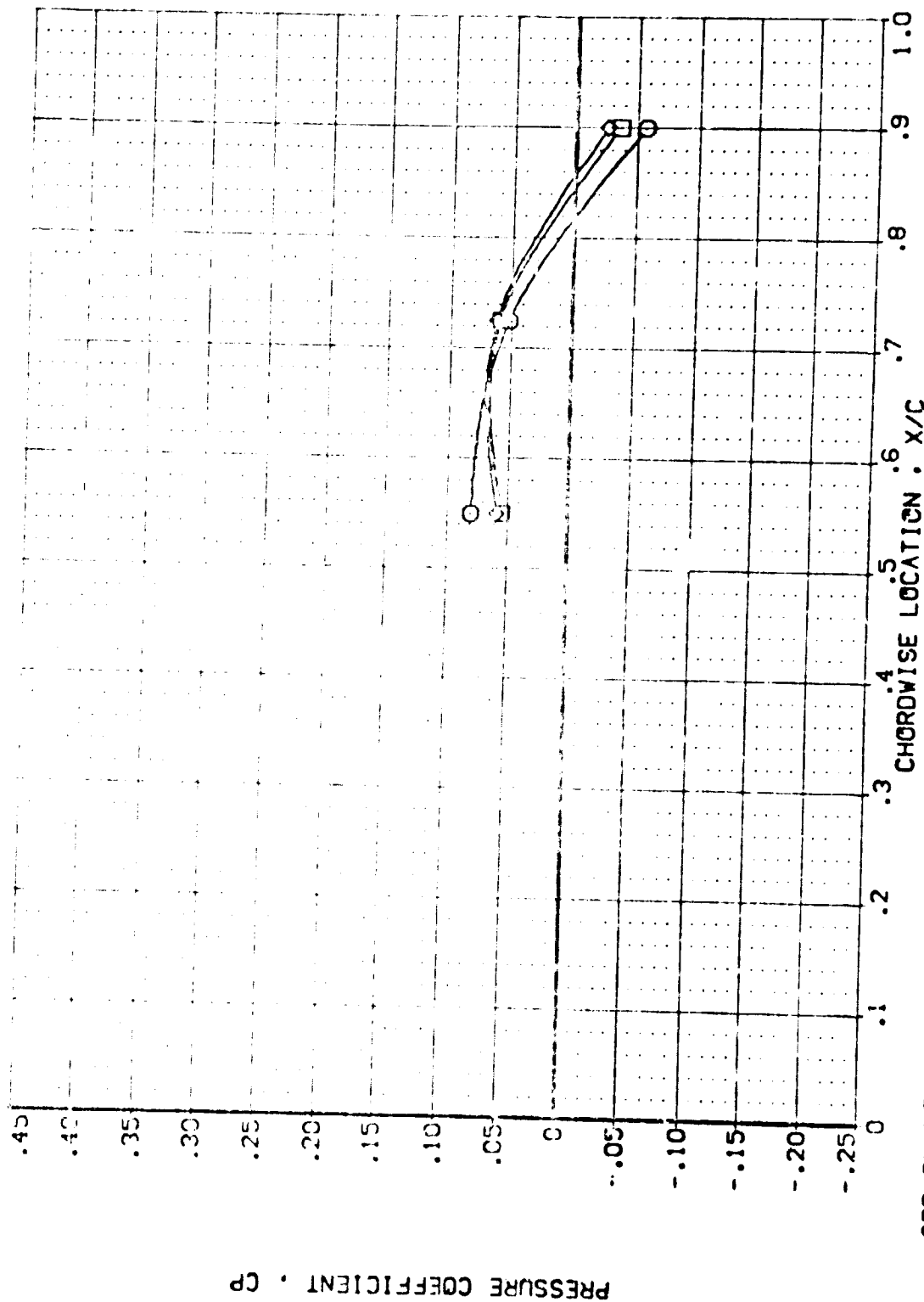


SR8 PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .427 PAGE 560

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	QPR	SR-PR	GINBAL
AMES 87-710	LA12C 01 T1 S1 LOWER WING PRESSURE	.000	23.850	.826	1.000
AMES 87-710	LA12C 01 T1 S1 LOWER WING PRESSURE	.000	23.850	.826	1.000
AMES 87-710	LA12C 01 T1 S1 LOWER WING PRESSURE	.000	23.850	.826	1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZD46)
(LBZD50)
(LBZ112)

AVES 87-710
AVES 87-710
AVES 87-710

1A12C 01 T1 S1
1A12C 01 T1 S1
1A12C 01 T1 S3

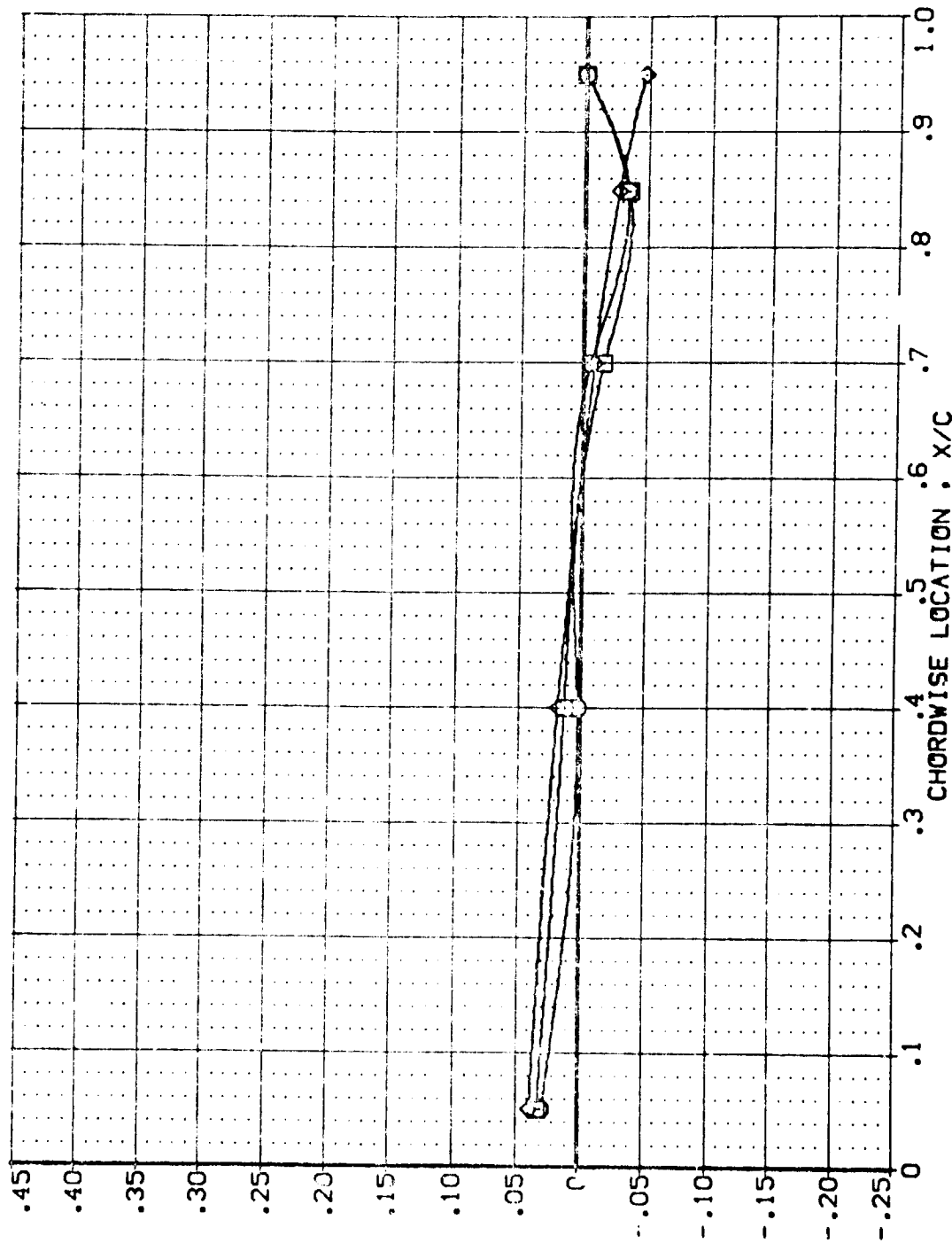
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER
.000
1.000
1.000

CAR
23.860
23.860

SRPR
.826
.826

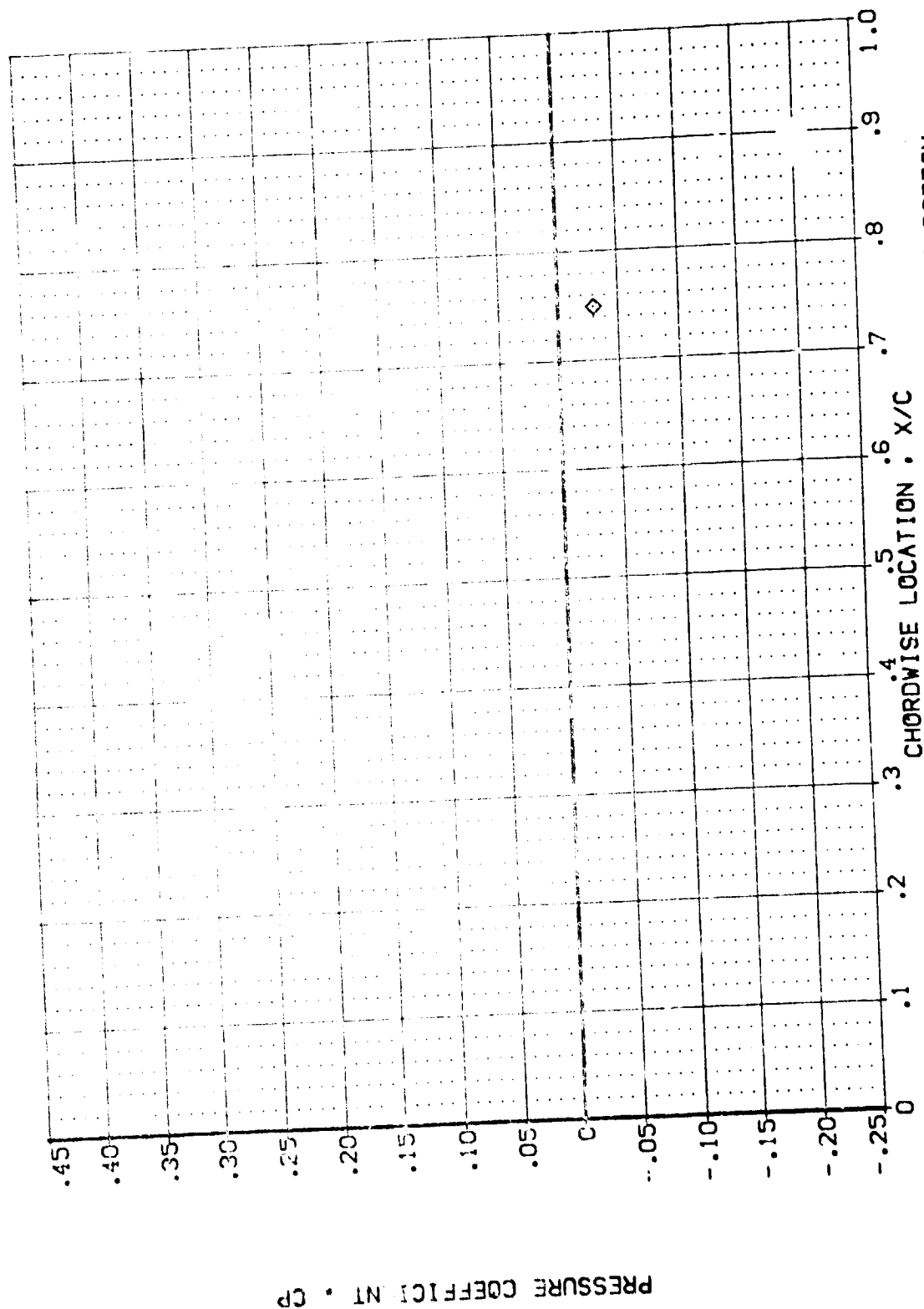
G1H2AL
1.000
1.000
1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .673

POWER	GBR	STPR	SIMBL
1,000			1,000
1,000	23,050	.826	1,000
1,000	23,050	.826	1,000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

SRB PLUME MISMATCH EFFECTS ON WAVE

MACH = 3.500	ALPHA = -8.000	Y/B = .780
--------------	----------------	------------

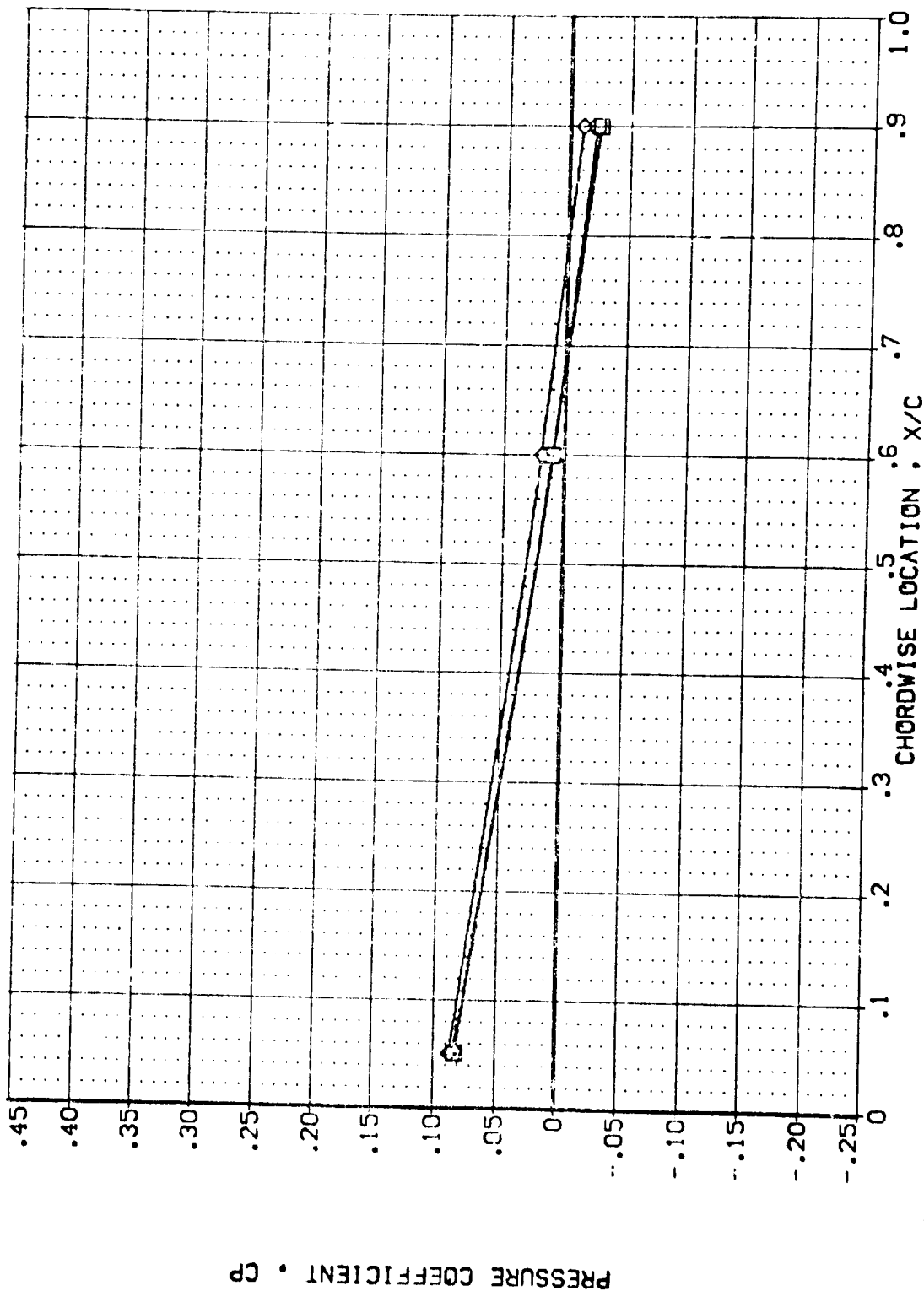
DATA SET SYMBOL

(LBZ046)
(LBZ050)
(LBZ112)

CONFIGURATION DESCRIPTION

AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 1A12C 01 T1 S3 LOWER WING PRESSURE

POWER 0.000 23.960 23.960
G/R 0.000 23.960 23.960
S/R 0.000 23.960 23.960
GIMBAL 1.000 1.000 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

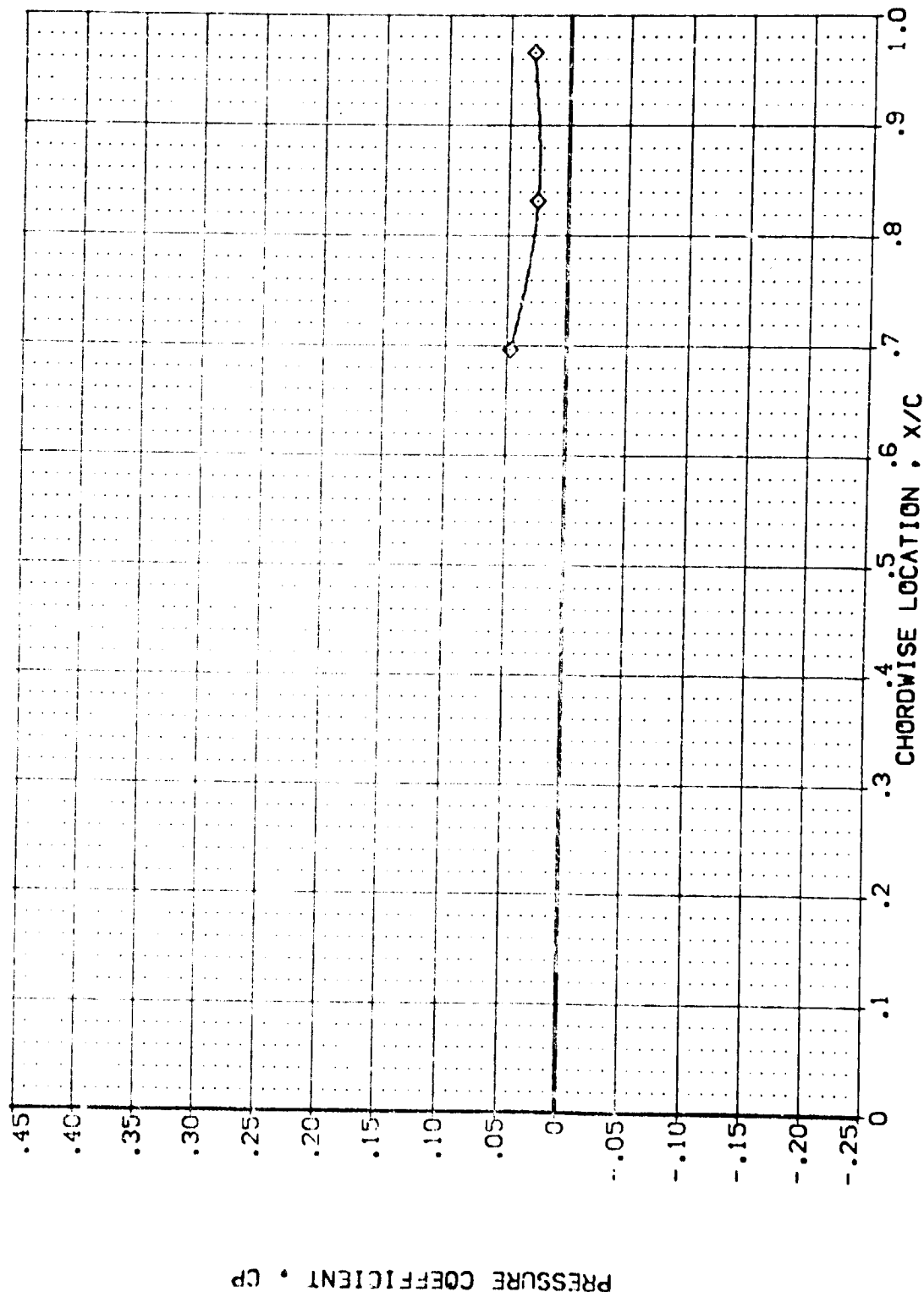
MACH = 3.500 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB7046)
(LB7050)
(LB7112)

AVES 87-710 [A12C 0] T1 S1 LOWER WING PRESSURE
AVES 87-710 [A12C 0] T1 S1 LOWER WING PRESSURE
AVES 87-710 [A12C 0] T1 S3 LOWER WING PRESSURE

POWER C/R S/RPR G/HMDAL
.000 23.860 1.000
1.000 23.860 .826
1.000 23.860 .026



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZD46)
(LBZD50)
(LBZ112)

APES 07-710 1A12C 01 T1 S1 LOWER WING PRESSURE
APES 07-710 1A12C 01 T1 S1 LOWER WING PRESSURE
APES 07-710 1A12C 01 T1 S3 LOWER WING PRESSURE

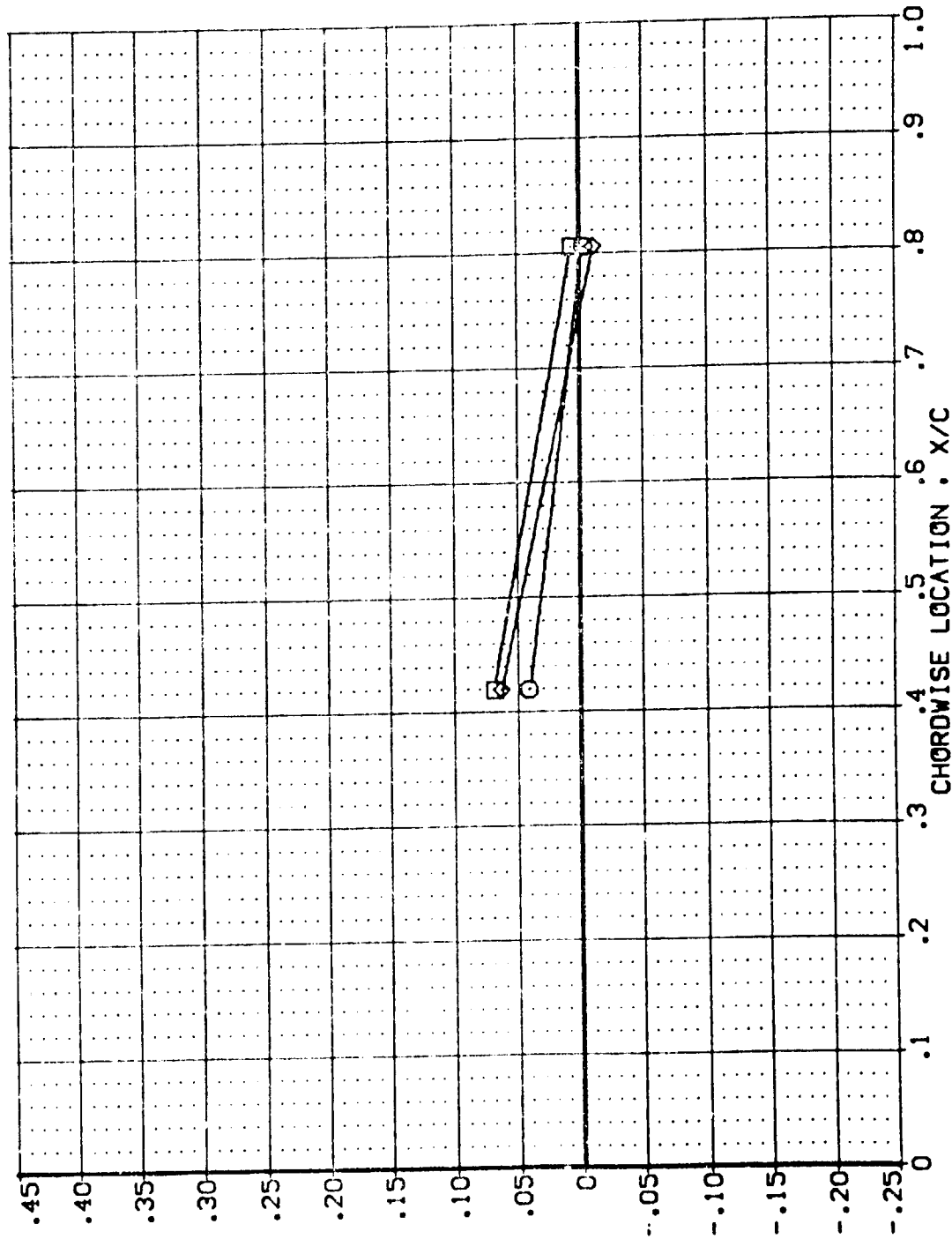
POWER 0.000
0.000
1.000
23.990
23.960

504R

G1/4BAL

1.000
1.000
1.000

.826
.526



PRESSURE COEFFICIENT, CP

SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .427

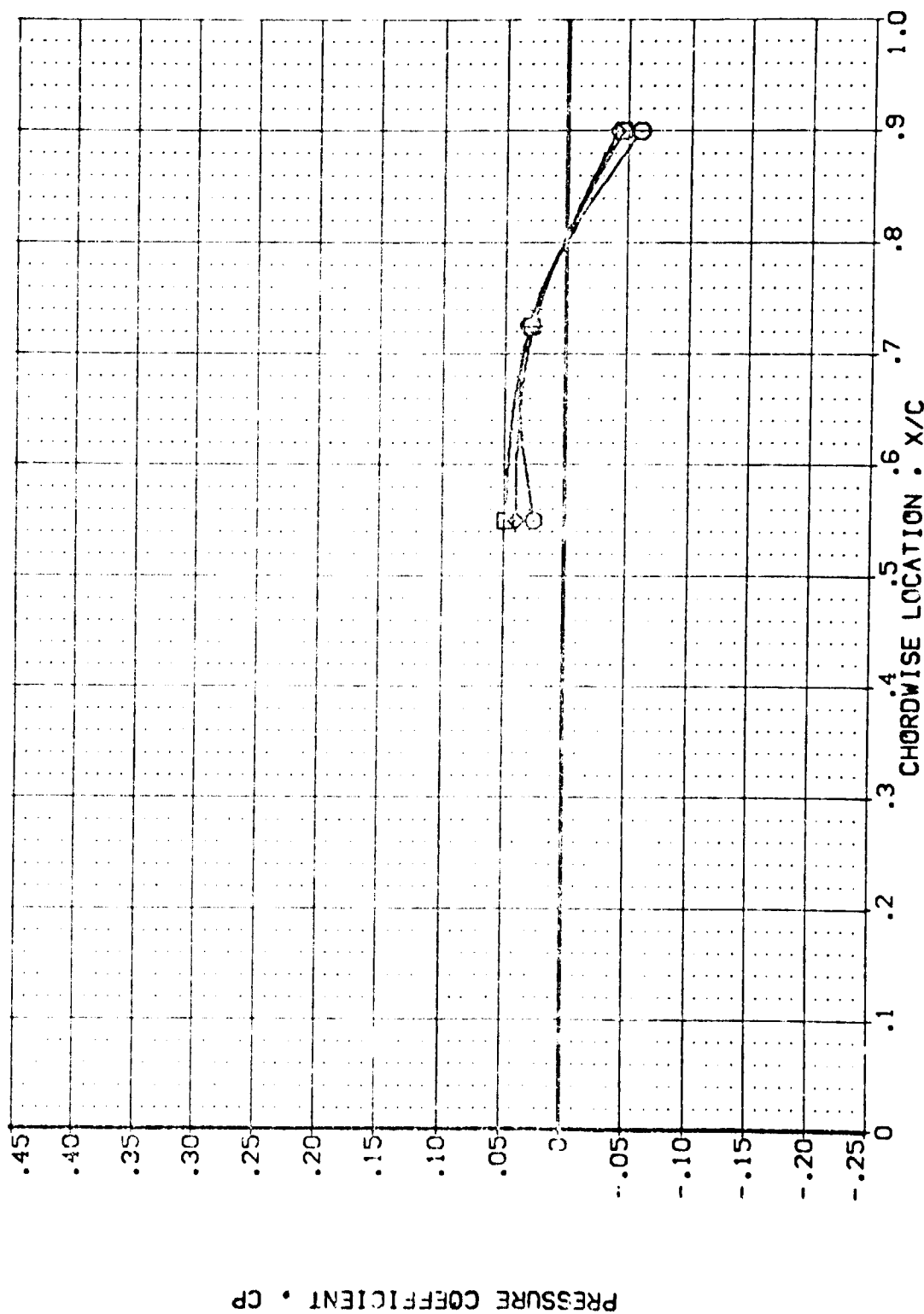
PAGE 566

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CPR SHPR GIMBAL

(LB2046) AVES 67-710 1A12C 01 T1 S1 LOWER WING PRESSURE .000 23.860 .876 1.000

(LB2050) AVES 67-710 1A12C 01 T1 S1 LOWER WING PRESSURE .000 23.860 .876 1.000

(LB2112) AVES 67-710 1A12C 01 T1 S3 LOWER WING PRESSURE .000 23.860 .876 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

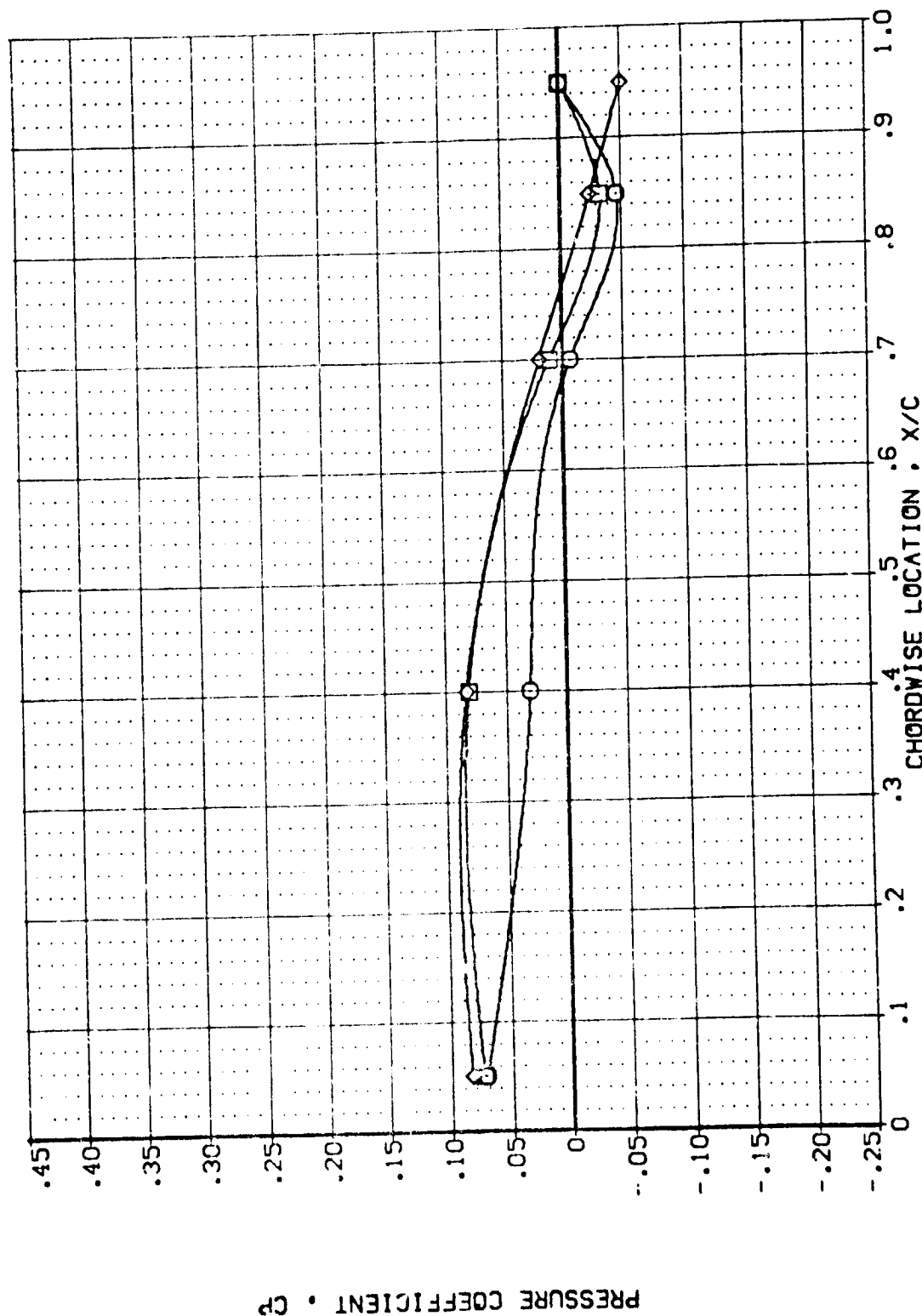
MACH = 3.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER QPR SR-PR GIMBAL

(LBZ046) ASES 87-710 [A]2C 01 T1 S1 LOWER WING PRESSURE 1.000 23.850 .826 1.000

(LBZ250) ASES 87-710 [A]2C 01 T1 S1 LOWER WING PRESSURE 1.000 23.850 .826 1.000

(LBZ112) ASES 87-710 [A]2C 01 T1 S3 LOWER WING PRESSURE 1.000 23.850 .826 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .673 PAGE 568

DATA SET SYMBOL: (LBZ046)
 (LBZ050)
 (LBZ112)

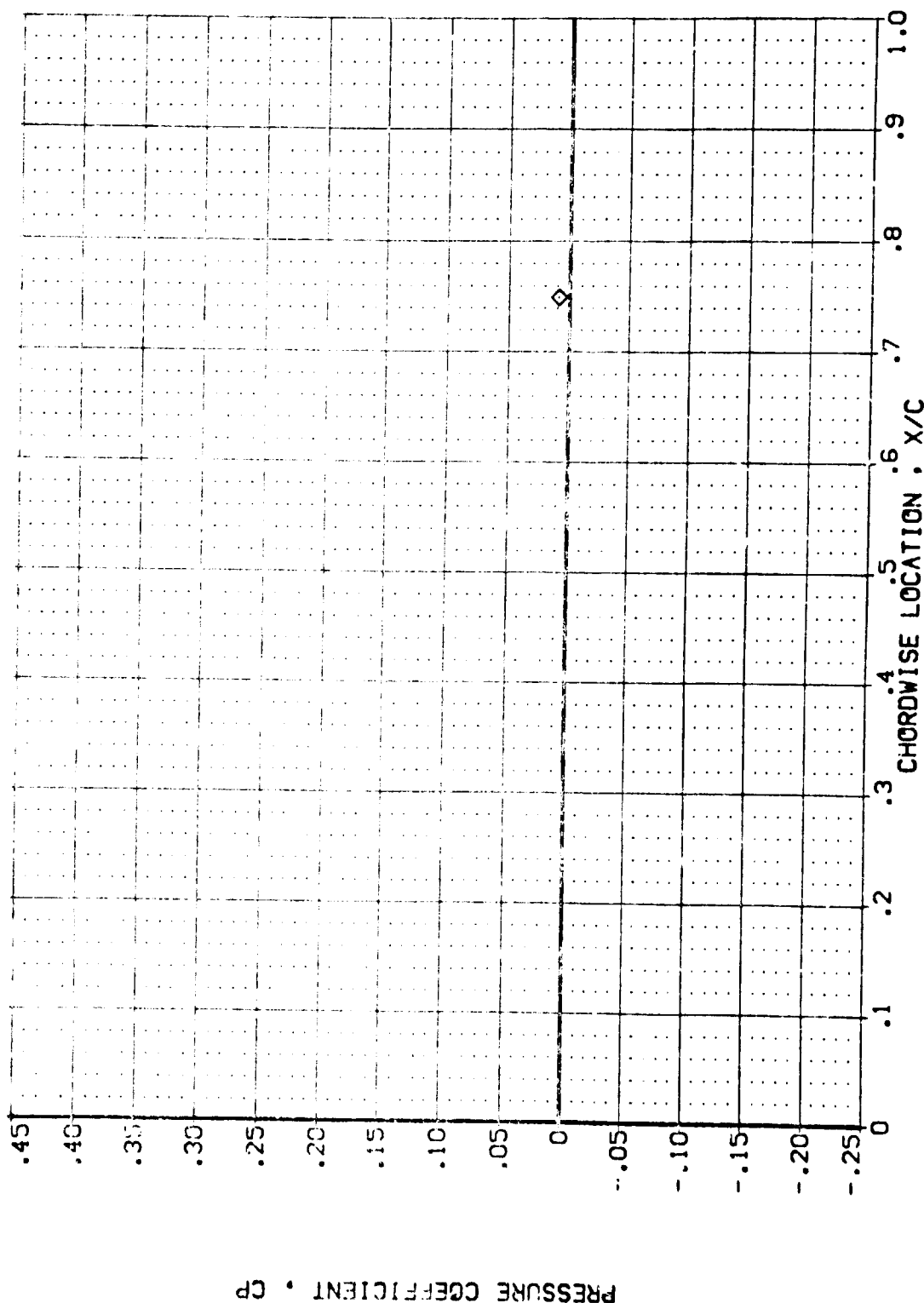
CONFIGURATION DESCRIPTION:
 AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 AYES 87-710 1A12C 01 T1 S3 LOWER WING PRESSURE

POWER: .000
 .000
 .000

OPR: 23.860
 23.860
 23.860

SPR: .826
 .826
 .826

GIMBAL: 1.000
 1.000
 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

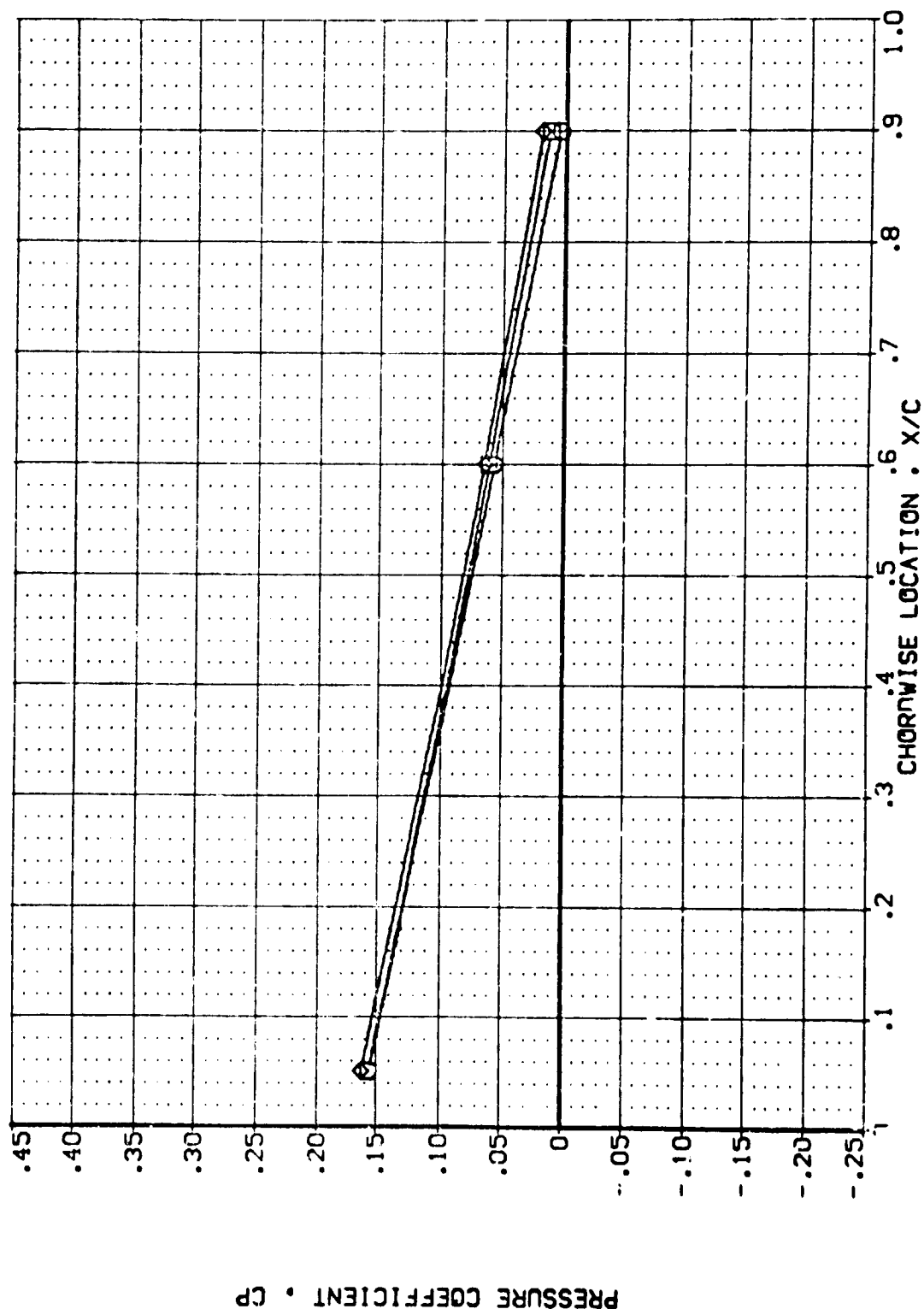
MACH = 3.500 ALPHA = .000 Y/B = .780

DATA SET SYMBOL

(LBZ046)
(LBZ55C)
(LBZ112)

CONFIGURATION DESCRIPTION
AHES 87-710 [A12C 0] T1 S1 LOWER WING PRESSURE
AHES 87-710 [A12C 0] T1 S1 LOWER WING PRESSURE
AHES 87-710 [A12C 0] T1 S3 LOWER WING PRESSURE

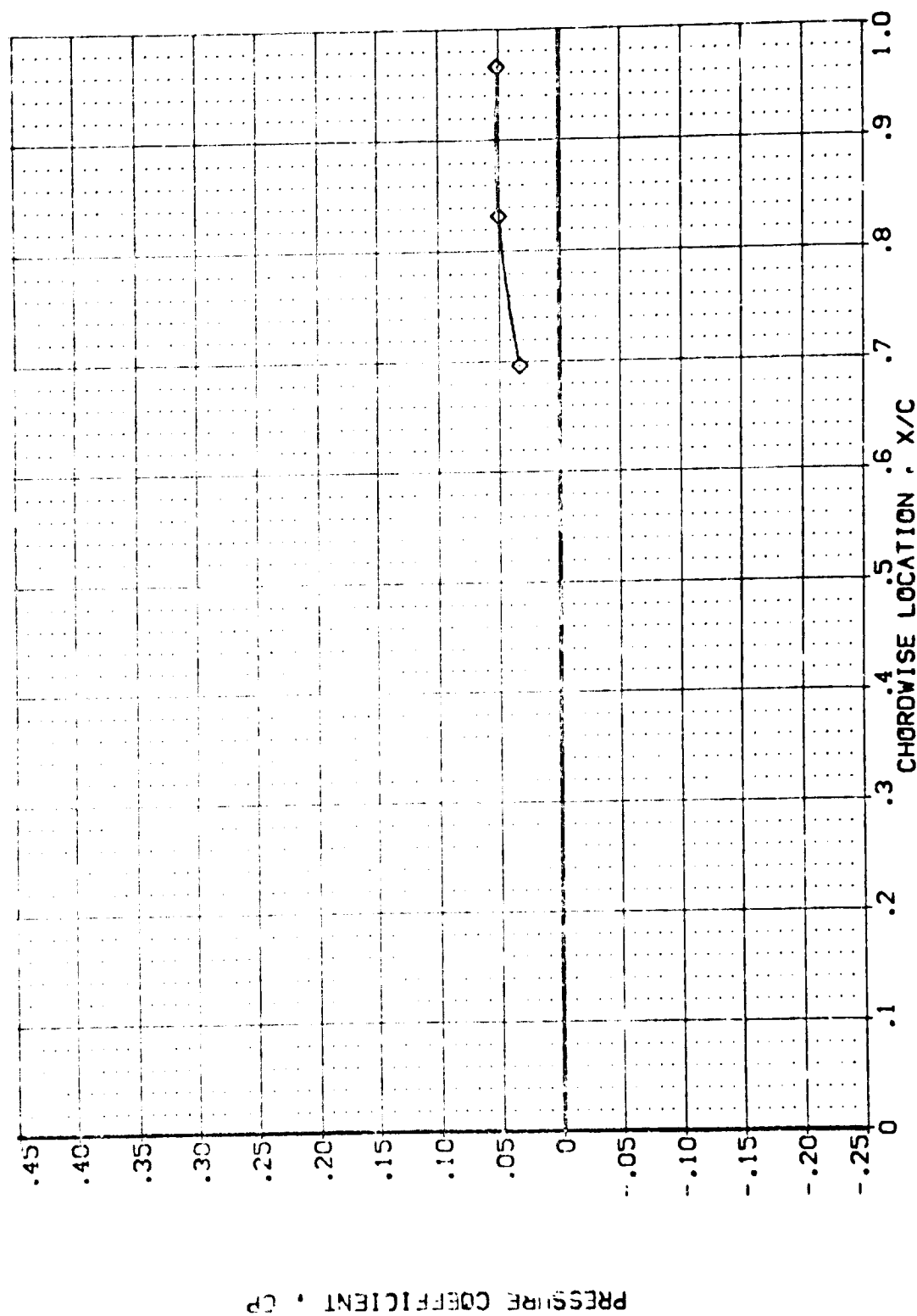
POWER 0.000 23.860 23.860
C/M 0.000 23.860 23.860
SPR 0.000 23.860 23.860
GIBBAL 1.000 1.000 1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .887

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CPR	S+PR	GIMBAL
LA0043	AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	1.000	23.960	.826	1.000
LA0043	AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	1.000	23.960	.826	1.000
LA0043	AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	1.000	23.960	.826	1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB7C46)
(LB7C50)
(LB7C12)

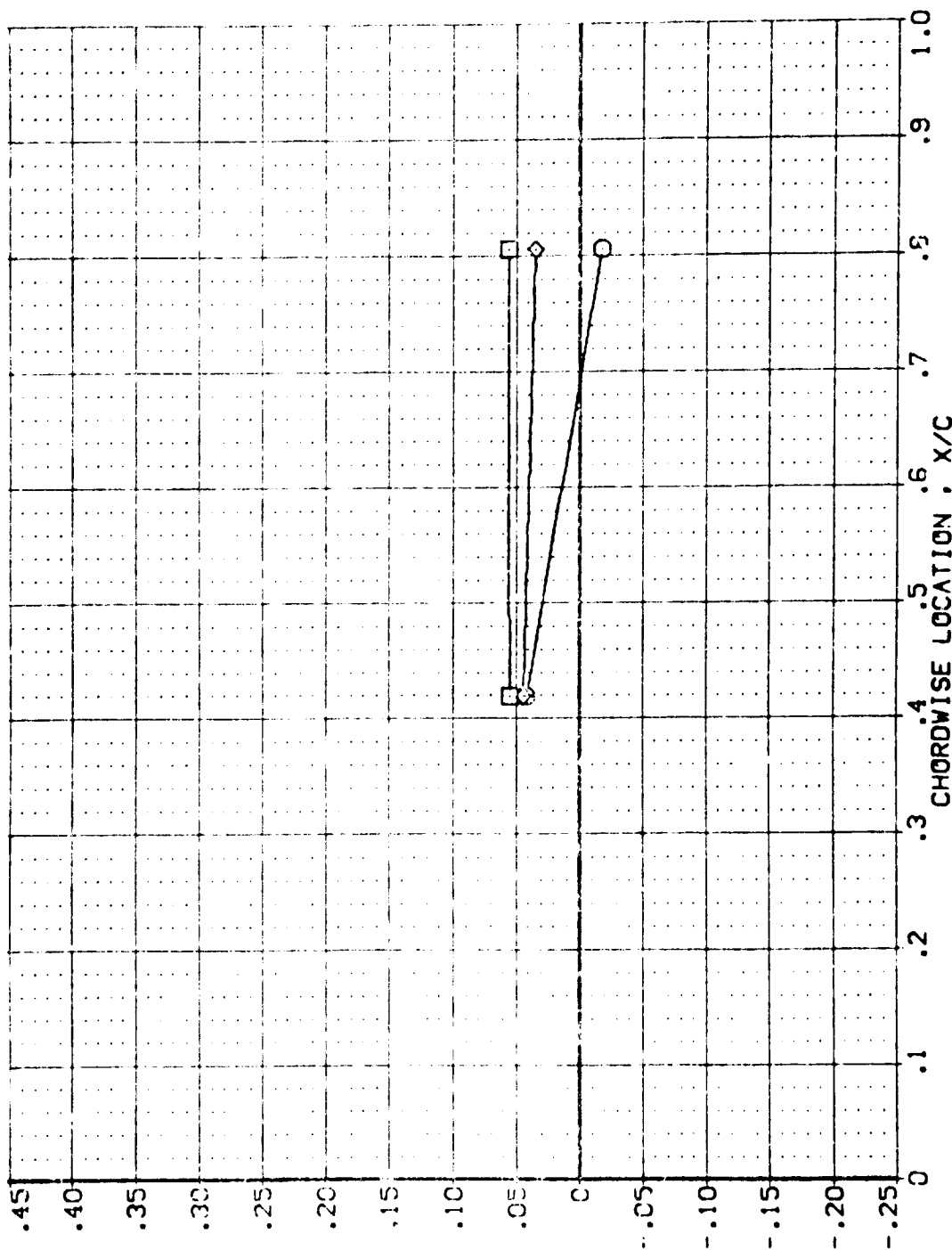
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S3 LOWER WING PRESSURE

POWER 0.000 23.850
1.000 23.850
1.000 23.850

SPR

GIMBAL

1.000
1.000
1.000



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .427

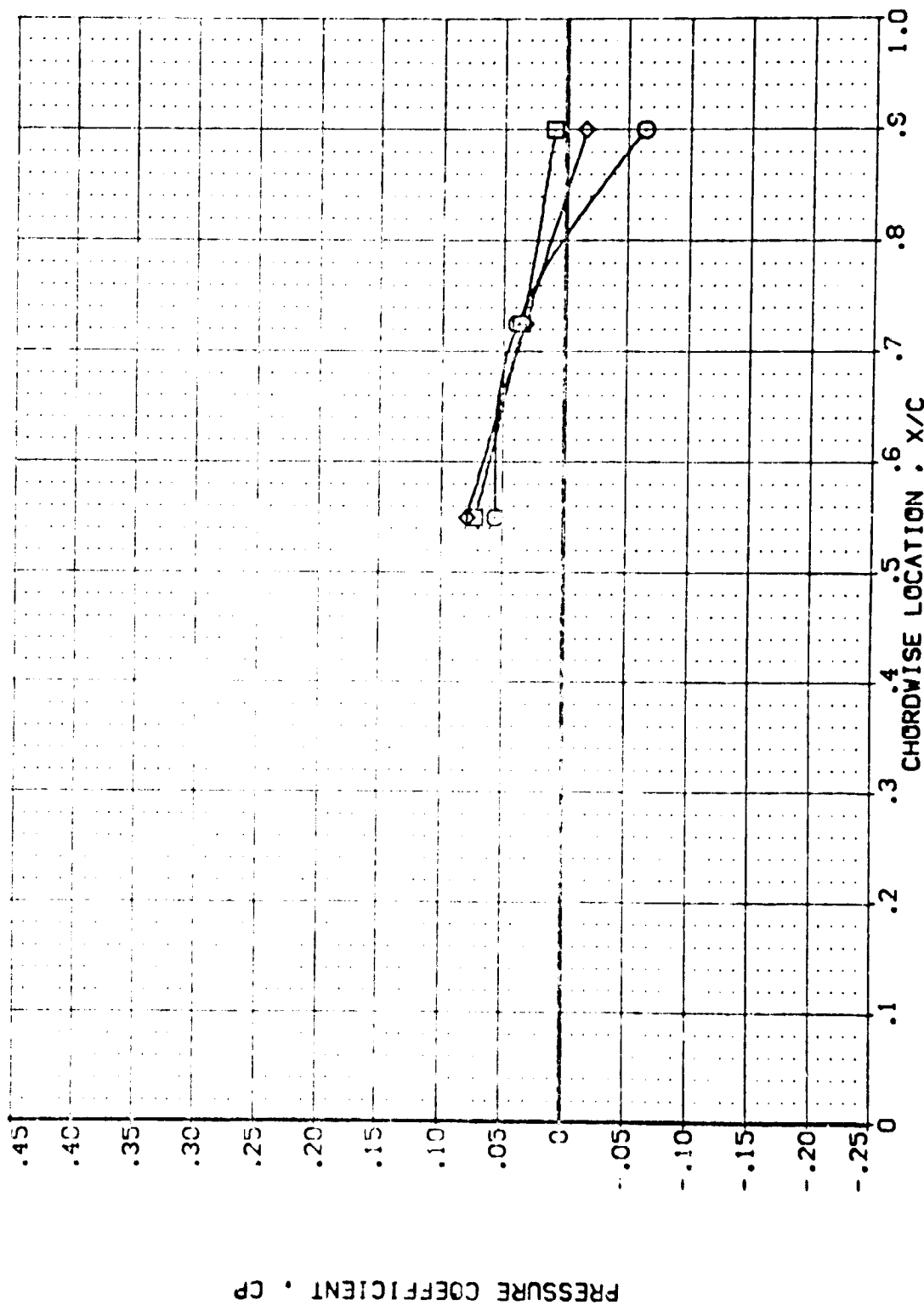
PAGE 572

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB7045)
(LB7040)
(LB7112)

AY'S 87-710 [A]2C 01 T1 S1 LOWER WING PRESSURE
AY'S 87-710 [A]2C 01 T1 S1 LOWER WING PRESSURE
AY'S 87-710 [A]2C 01 T1 S3 LOWER WING PRESSURE

POWER CTR SRPR GIMBAL
.000 23.860 .826 1.000
1.000 23.860 .826 1.000
1.000 23.860 .826 1.000



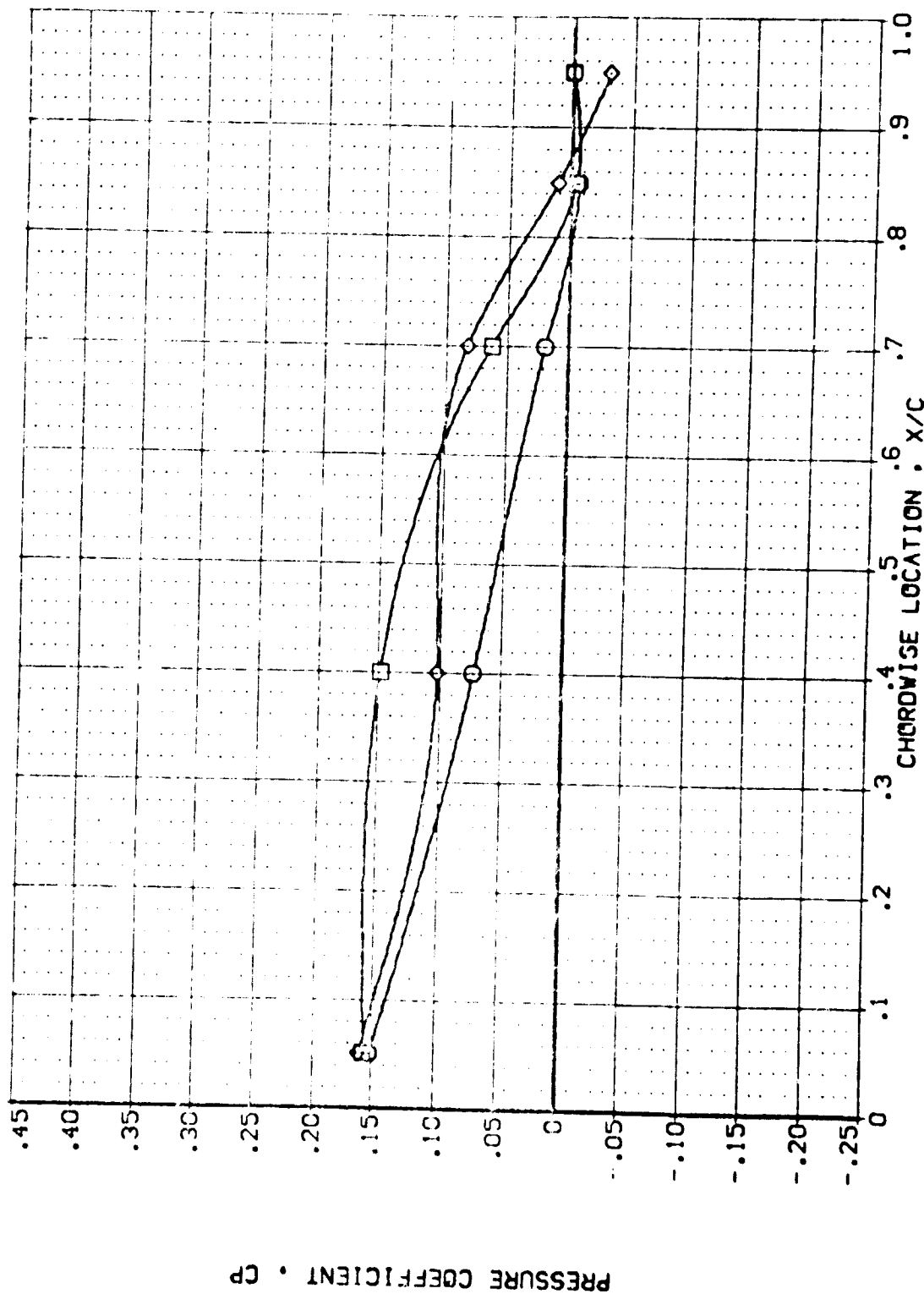
SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOLS: (LB2046) (LB2050) (LB2112)

CONFIGURATION DESCRIPTION:
 AYES 87-710 [A] 20 01 T1 S1 LOWER WING PRESSURE
 AYES 87-710 [A] 20 01 T1 S1 LOWER WING PRESSURE
 AYES 87-710 [A] 20 01 T1 S3 LOWER WING PRESSURE

POWER: .000 1.000 1.000
 C/M: 23.860 23.860
 STEP: .876 .876
 GIMBAL: 1.000 1.000



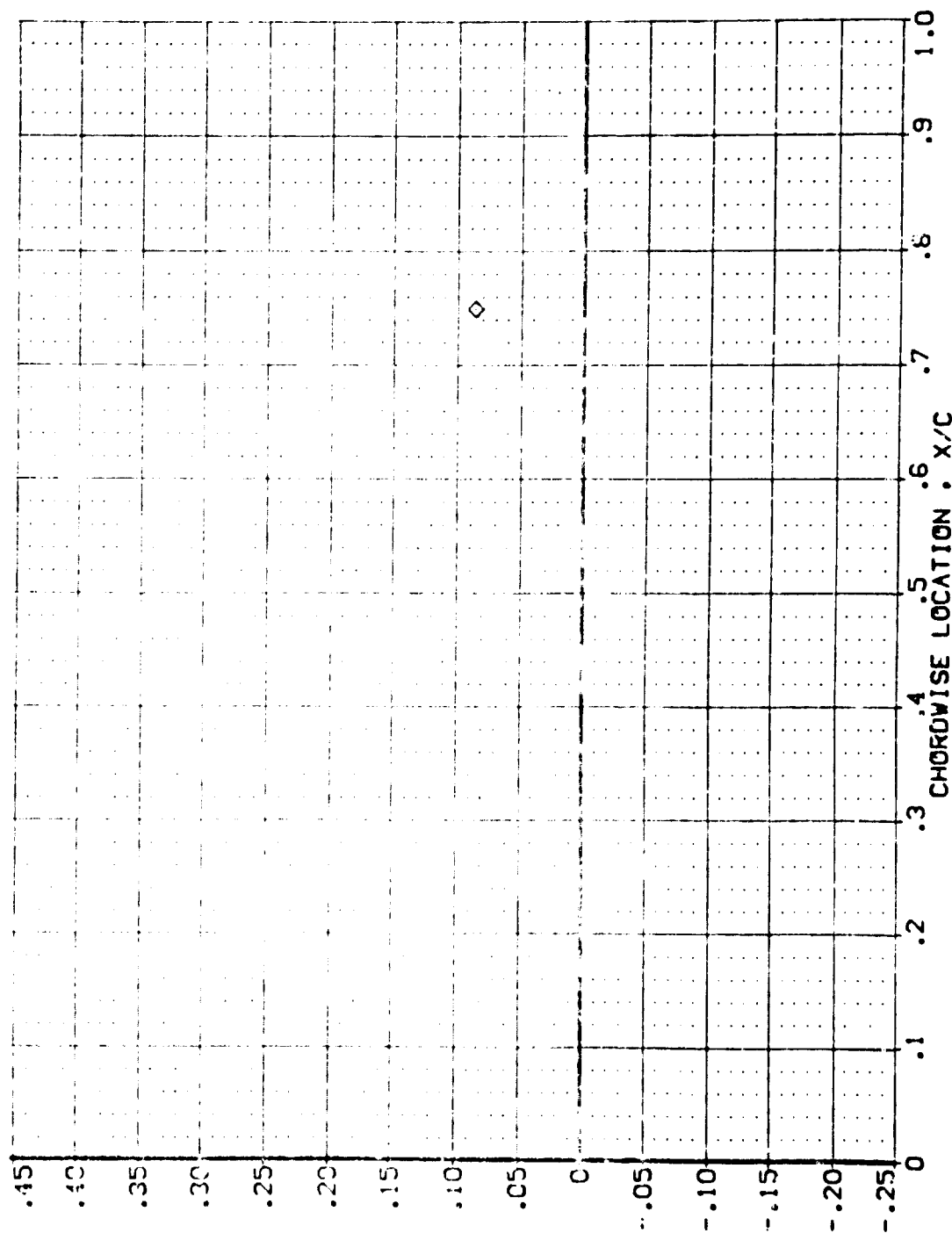
SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[L00046] Q ASES 87-710 IALPC 01 T1 S1 LOWER WING PRESSURE
 [L00047] Q ASES 87-710 IALPC 01 T1 S1 LOWER WING PRESSURE
 [L00048] Q ASES 87-710 IALPC 01 T1 S1 LOWER WING PRESSURE

POWER DPR STPR GINBAL
 .000 23.860 .876 1.000
 1.000 23.860 .626 1.000



PRESSURE COEFFICIENT • CP

SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .78C

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZD46)
(LBZD50)
(LBZ112)

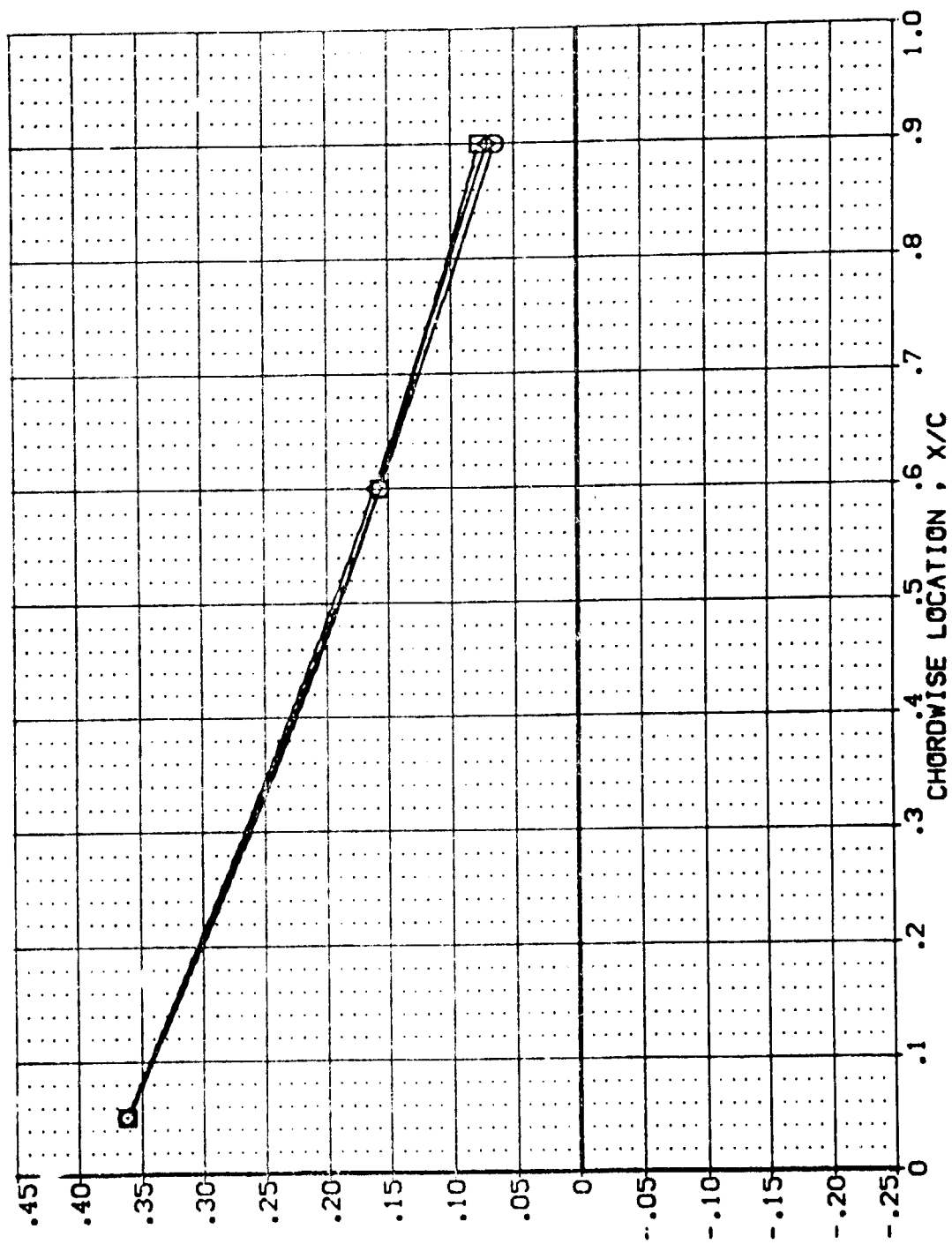
AMES 87-710 [A12C 01 T] S1 LOWER WING PRESSURE
AMES 87-710 [A12C 01 T] S1 LOWER WING PRESSURE
AMES 87-710 [A12C 01 T] S3 LOWER WING PRESSURE

POWER 0.000 23.860
1.000 23.860
1.000 23.860

SRPR 1.000
1.000
1.000

GIMBAL 1.000
1.000
1.000

PRESSURE COEFFICIENT, CP



SRB PLUME MISMATCH EFFECTS ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .887

PAGE 576

DATA SET 87-80L

{UBZ036}
 {UBZ041}
 {UBZ114}
 {UBZ117}

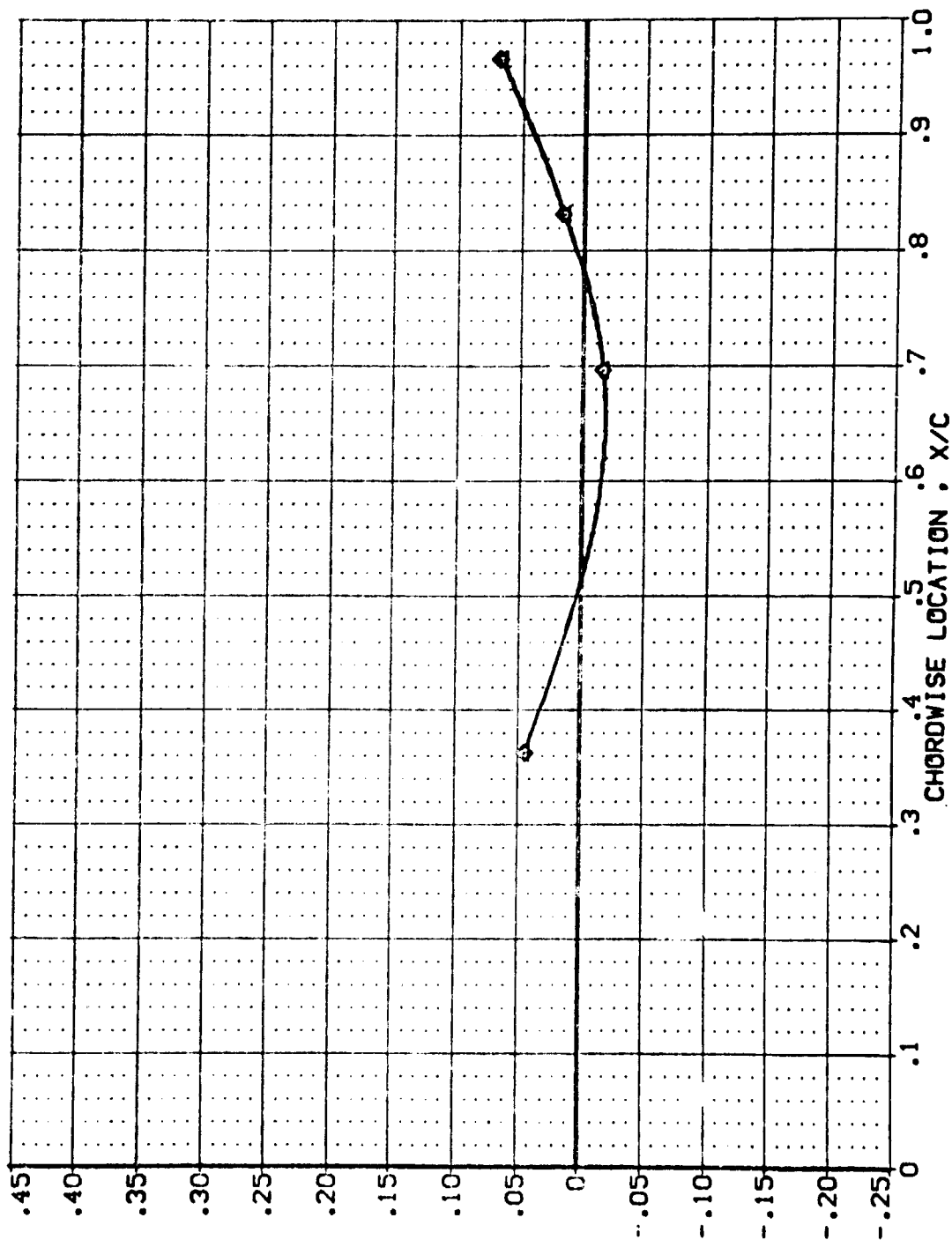
CONFIGURATION DESCRIPTION

AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 AYES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE
 AYES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE

POWER 1.000
 1.000 26.860
 1.000 26.860
 1.000 26.860

SPR 1.000
 .768
 .768

GIMBAL 1.000
 1.000
 1.000

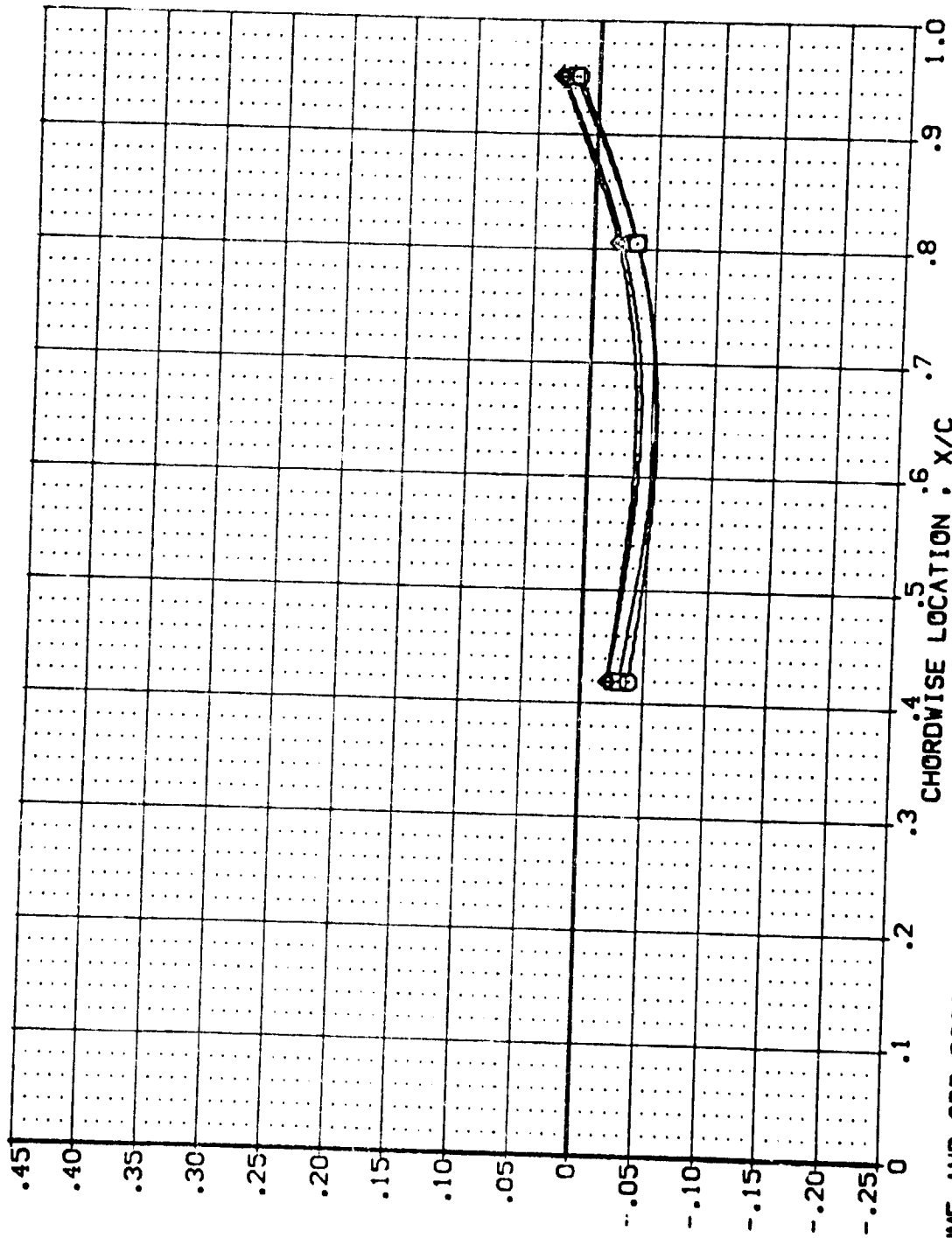


PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ038)	AVES 87-710	IA12C 01	T1	S1	UPPER	VING	PRESSURE	POWER	OPR	SRMR	GIMBAL
(UBZ041)	AVES 87-710	IA12C 01	T1	S1	UPPER	VING	PRESSURE	1.000	26.860	.768	1.000
(UBZ114)	AVES 87-710	IA12C 01	T1	S2	UPPER	VING	PRESSURE	1.000	26.860	.768	1.000
(UBZ117)	AVES 87-710	IA12C 01	T1	S2	UPPER	VING	PRESSURE	1.000	26.860	.768	1.000

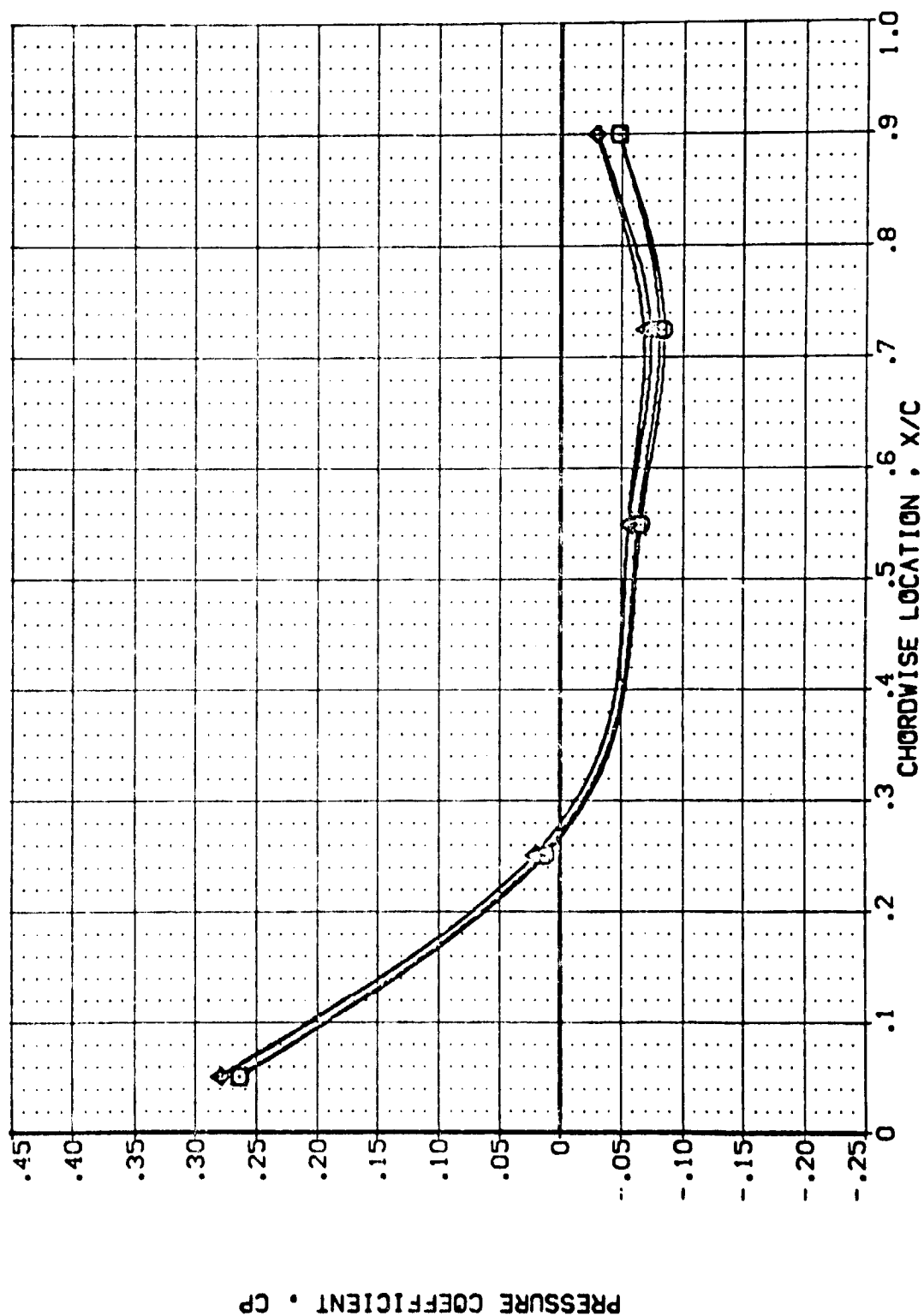


PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

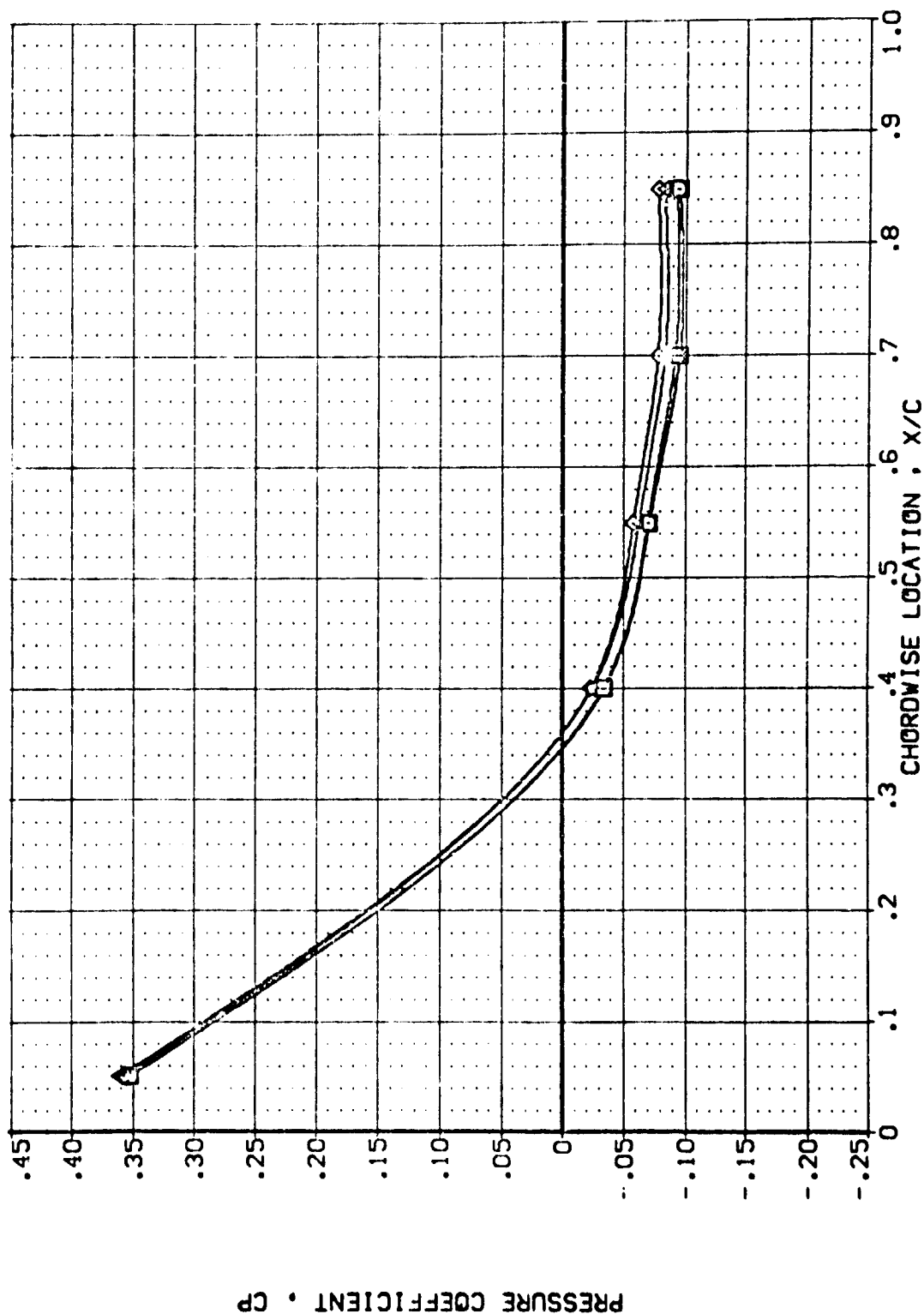
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SR-PR	Q/MBAL
(UBZ038)	AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	.000			1.000
(UBZ041)	AVES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	1.000	26.950	.768	1.000
(UBZ114)	AVES 87-710 [A12C 01 T1 S2] UPPER WING PRESSURE	.000			1.000
(UBZ117)	AVES 87-710 [A12C 01 T1 S2] UPPER WING PRESSURE	1.000	26.950	.768	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CPR	SRPR	SIMBAL
(UBZ008)	APES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	1.000	26.860	.768	1.000
(UBZ041)	APES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	1.000	26.860	.768	1.000
(UBZ114)	APES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE	1.000	26.860	.768	1.000
(UBZ117)	APES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE	1.000	26.860	.768	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

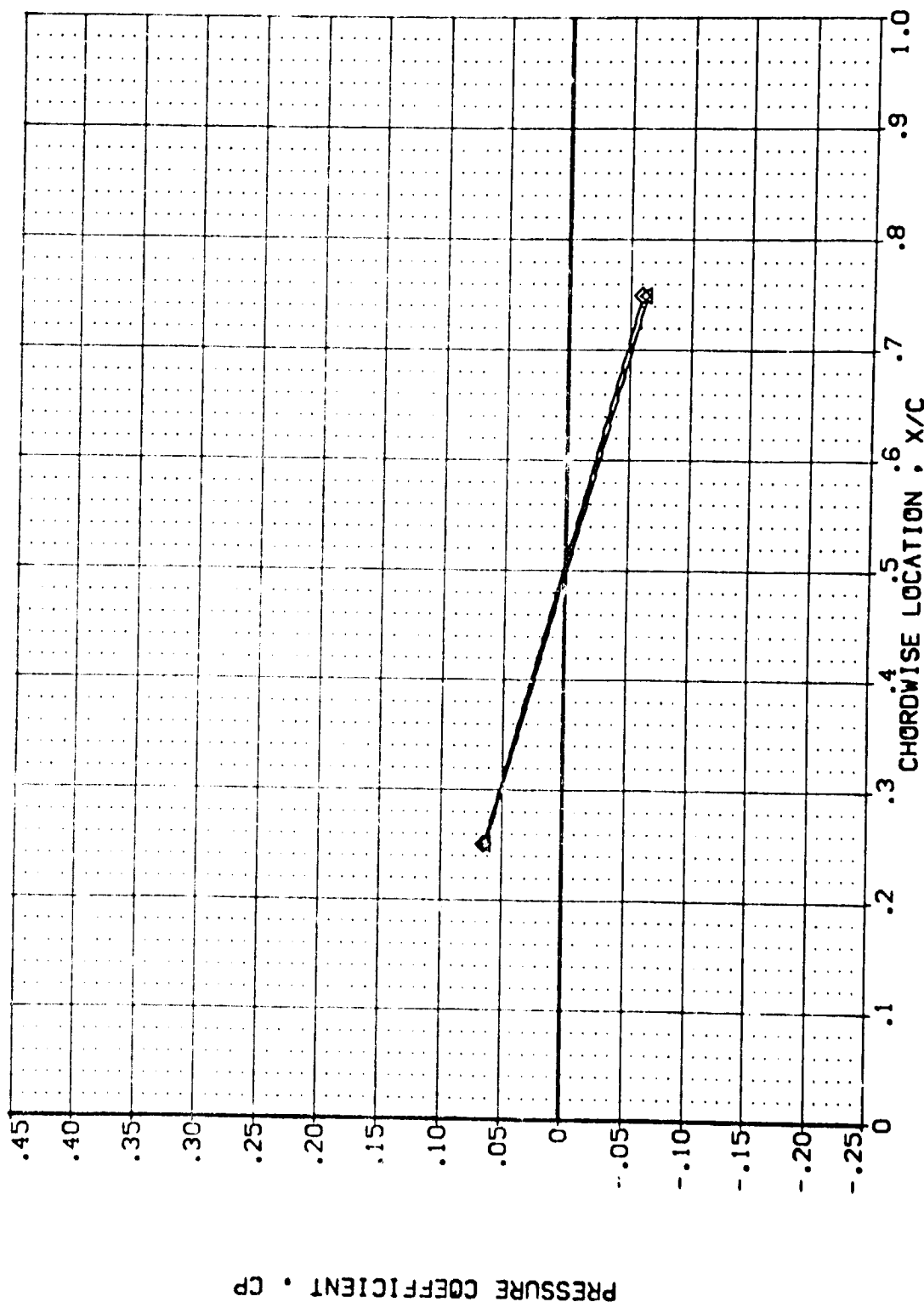
MACH = 3.000 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ008)
(UBZ041)
(UBZ114)
(UBZ117)

AVES 87-710 [A]2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 [A]2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 [A]2C 01 T1 S2 UPPER WING PRESSURE
AVES 87-710 [A]2C 01 T1 S2 UPPER WING PRESSURE

POWER 0.000 26.860 26.360
SRPR 1.000 .768 .768
GIMBAL 1.000 1.000 1.000

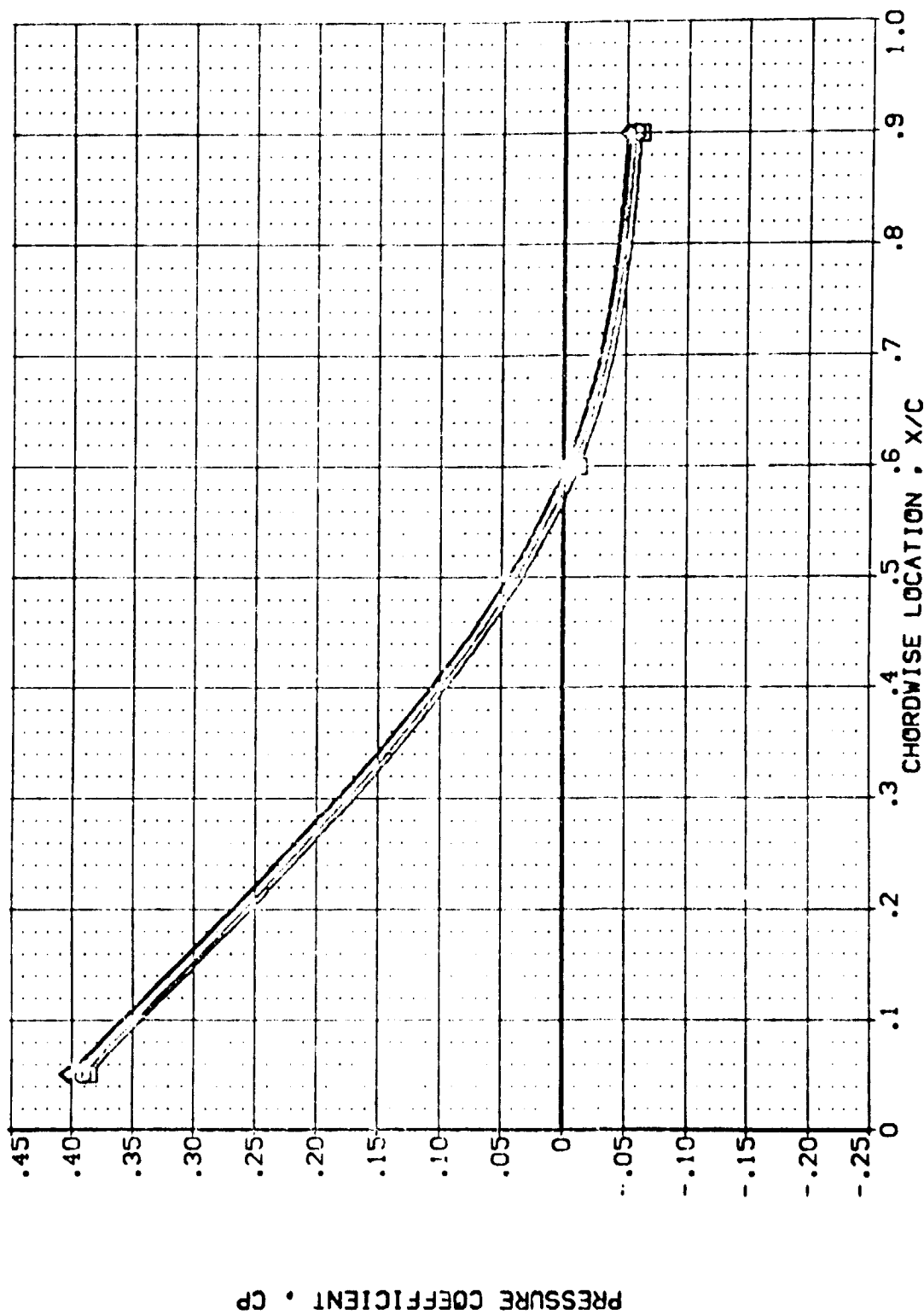


PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

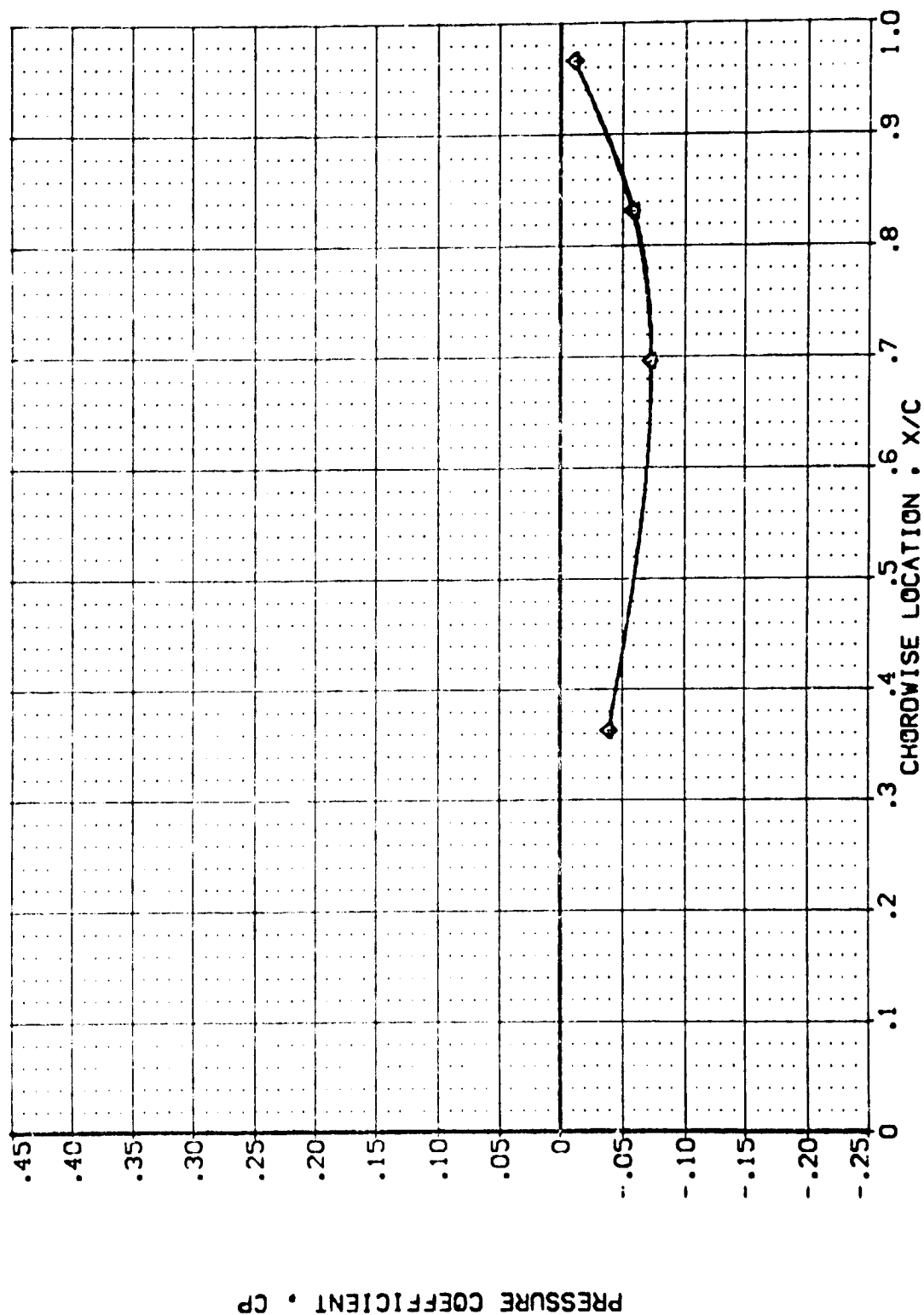
(UBZ039)	AVES 87-710	AI12C 01	T1 S1	UPPER WING PRESSURE	POWER	QPR	SRPR	GIMBAL
(UBZ041)	AVES 87-710	AI12C 01	T1 S1	UPPER WING PRESSURE	1.000	26.860	.708	1.000
(UBZ114)	AVES 87-710	AI12C 01	T1 S2	UPPER WING PRESSURE	1.000	26.860	.768	1.000
(UBZ117)	AVES 87-710	AI12C 01	T1 S2	UPPER WING PRESSURE	1.000	26.860	.768	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	DPR	SWPR	GIMBAL
(U37038)	AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	.000			1.000
(U37041)	AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	1.000	26.860	.768	1.000
(U37114)	AMES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE	1.000			1.000
(U37117)	AMES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE	1.000	26.860	.768	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .299

DATA SET SYMBOL
(UB2008)
(UB2041)
(UB2114)
(UB2117)

CONFIGURATION DESCRIPTION
AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

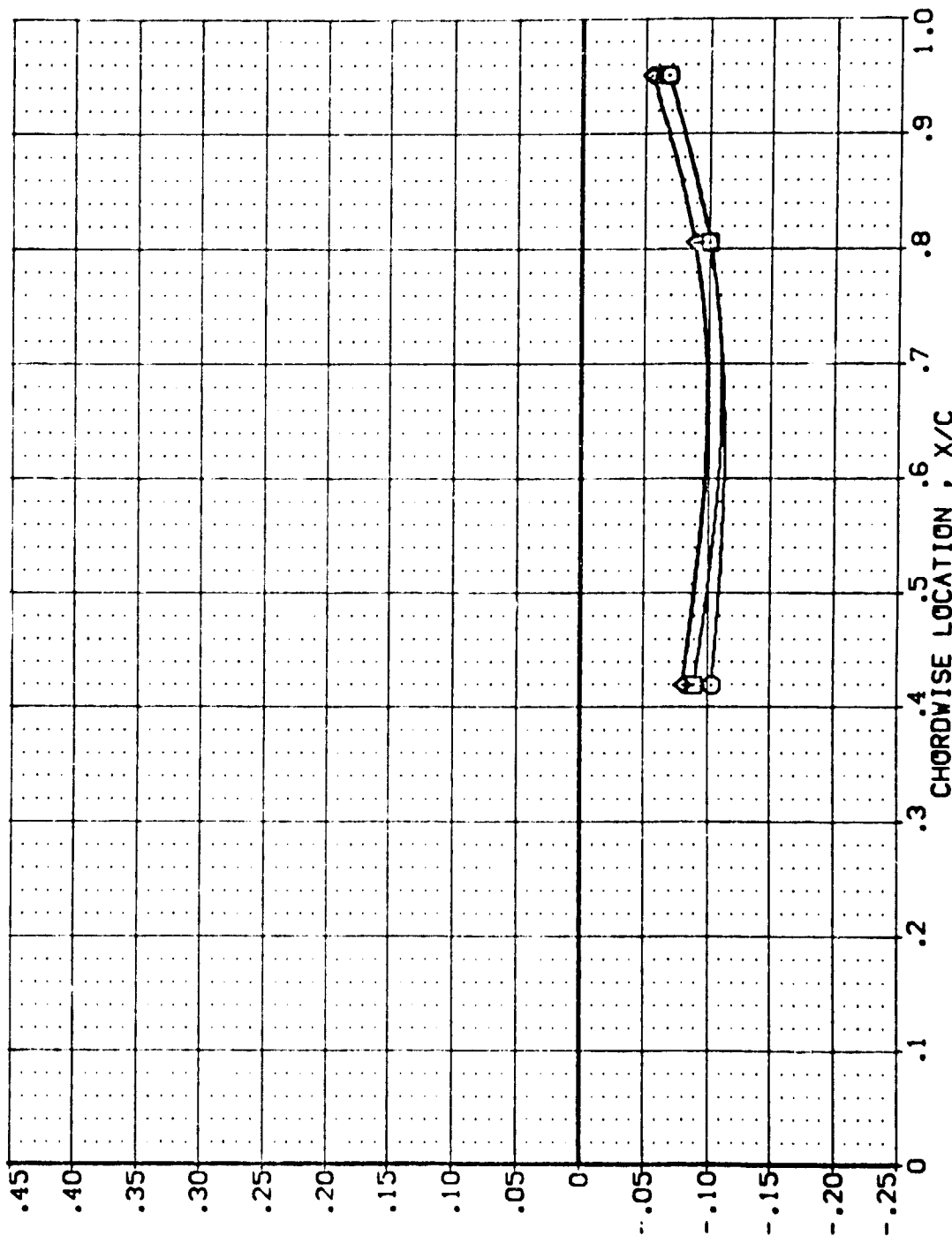
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER
.000
1.000
.000
1.000

CPR
26.660
26.660

SRPR
.768
.768

GINBAL
1.000
1.000
1.000
1.000



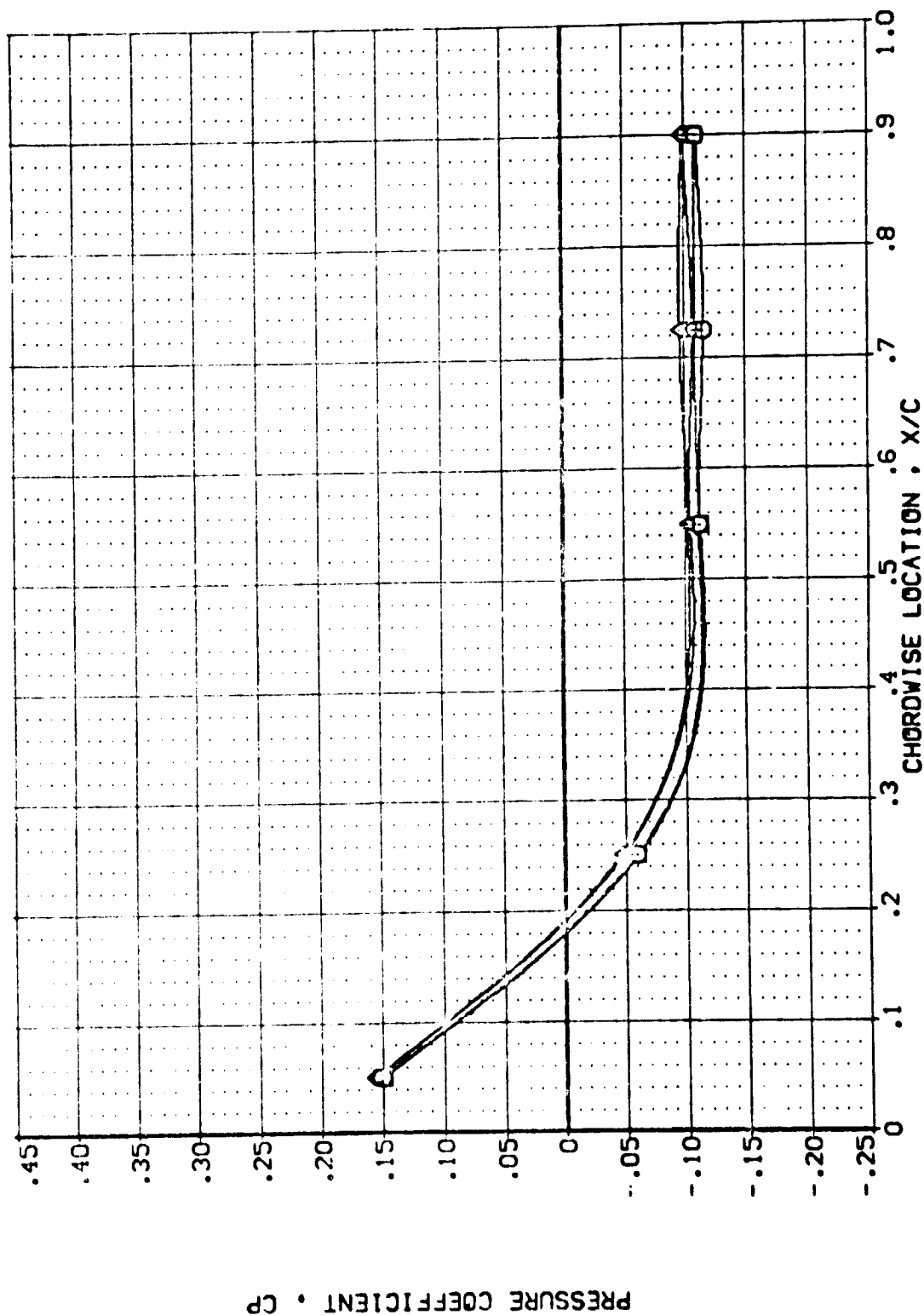
PRESSURE COEFFICIENT • CP

PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .427

PAGE 584

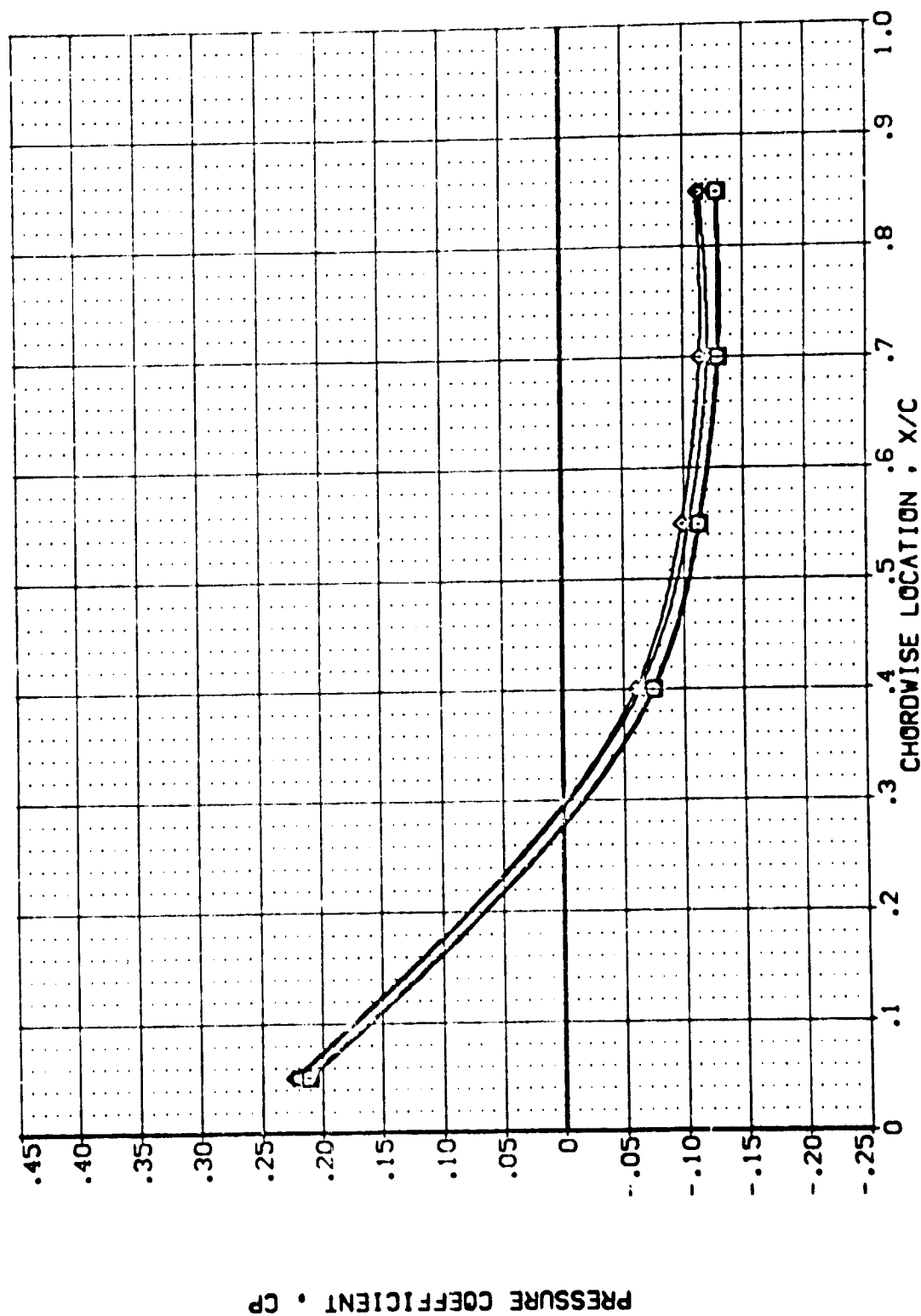
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SR-PR	GIMBAL
(UB2038)	AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	.000	26.860	.768	1.000
(UB2041)	AMES 87-710 [A12C 01 T1 S1] UPPER WING PRESSURE	1.000			1.000
(UB2114)	AMES 87-710 [A12C 01 T1 S2] UPPER WING PRESSURE	.000			1.000
(UB2117)	AMES 87-710 [A12C 01 T1 S2] UPPER WING PRESSURE	1.000	26.050	.768	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .534 PAGE 585

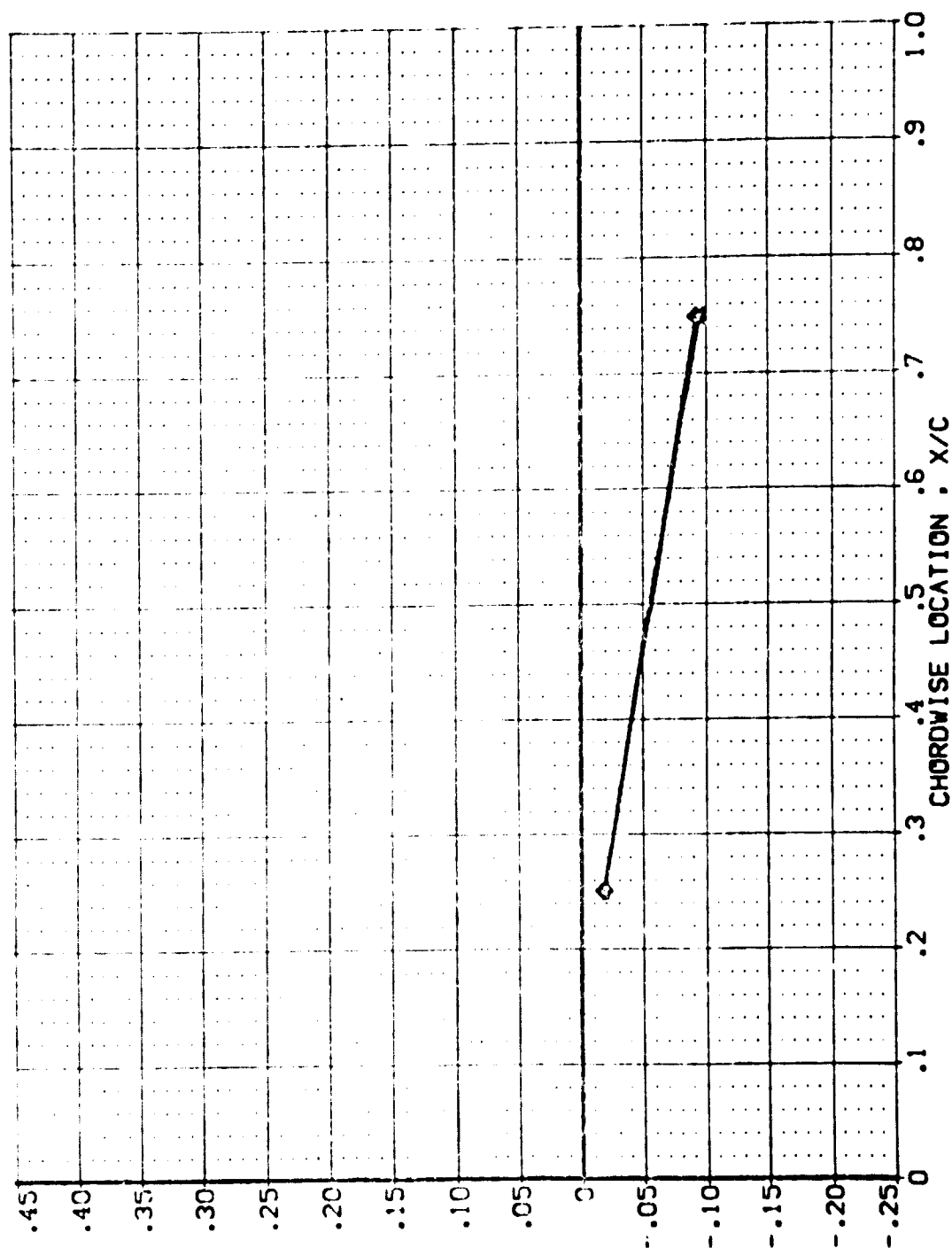
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	C/D	SRPR	GIMBAL
(UBZ038)	AVES 87-710 IAI2C 01 T1 S1	.000	26.860	.766	1.000
(UBZ041)	AVES 87-710 IAI2C 01 T1 S1	1.000	26.860	.766	1.000
(UBZ114)	AVES 87-710 IAI2C 01 T1 S2	.000	26.860	.766	1.000
(UBZ117)	AVES 87-710 IAI2C 01 T1 S2	1.000	26.860	.766	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TIP

MACH = 3.000 ALPHA = .000 Y/B = .673 PAGE 596

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SRPR	GIMBAL
(UB2039)	AMES 87-710 [A]2C 01 T1 S1 UPPER WING PRESSURE	.000			1.000
(UB2041)	AMES 87-710 [A]2C 01 T1 S1 UPPER WING PRESSURE	1.000	26.860	.758	1.000
(UB2114)	AMES 87-710 [A]2C 01 T1 S2 UPPER WING PRESSURE	.000			1.000
(UB2117)	AMES 87-710 [A]2C 01 T1 S2 UPPER WING PRESSURE	1.000	26.860	.758	1.000

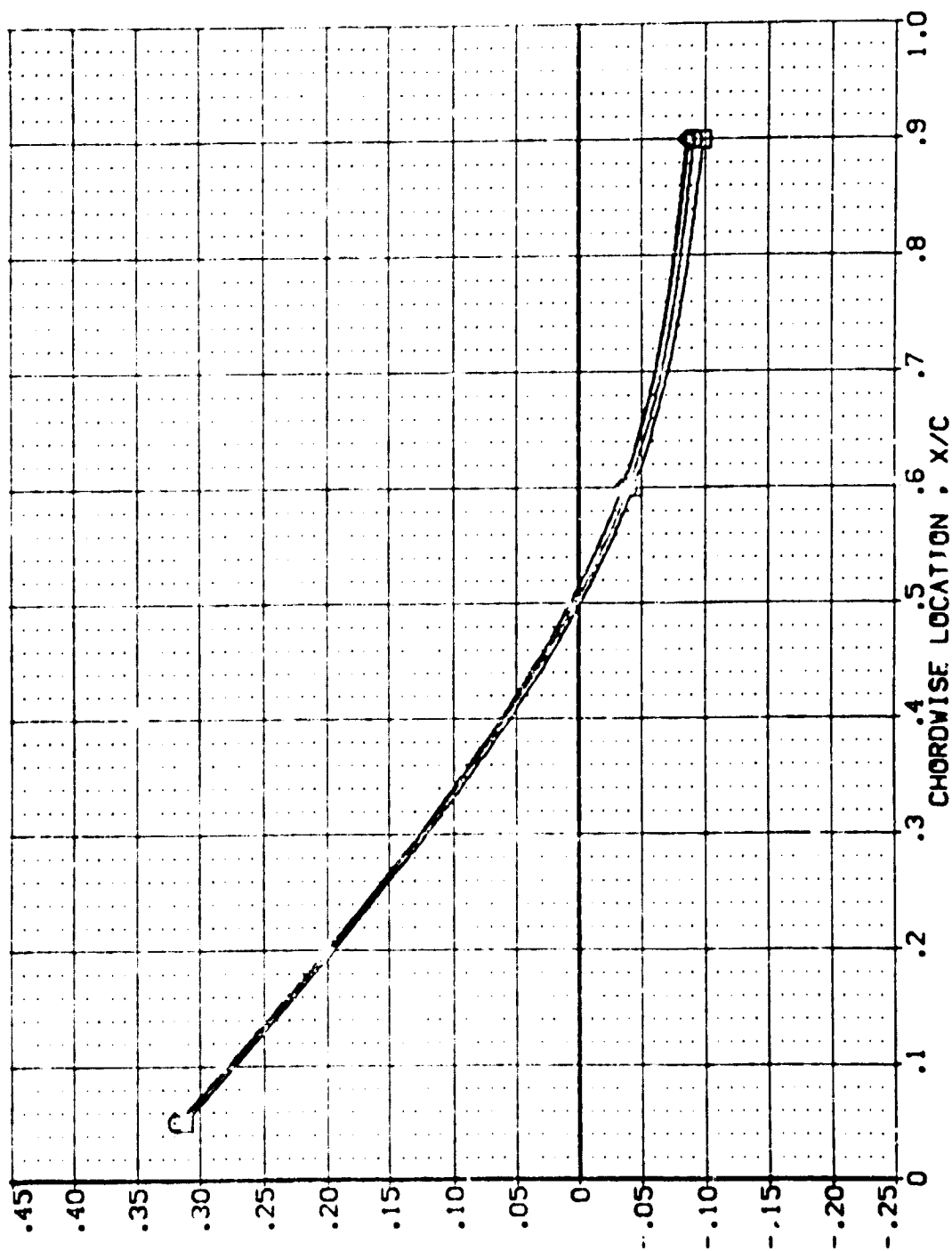


PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .780 PAGE 587

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (U72038) APES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (U72041) APES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
 (U72114) APES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE
 (U72117) APES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE

POWER DPR SPDR GINBAL
 .000 26.860 .768 1.000
 1.000 26.860 .768 1.000
 1.000 26.860 .768 1.000



PLUME AND SIB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .887

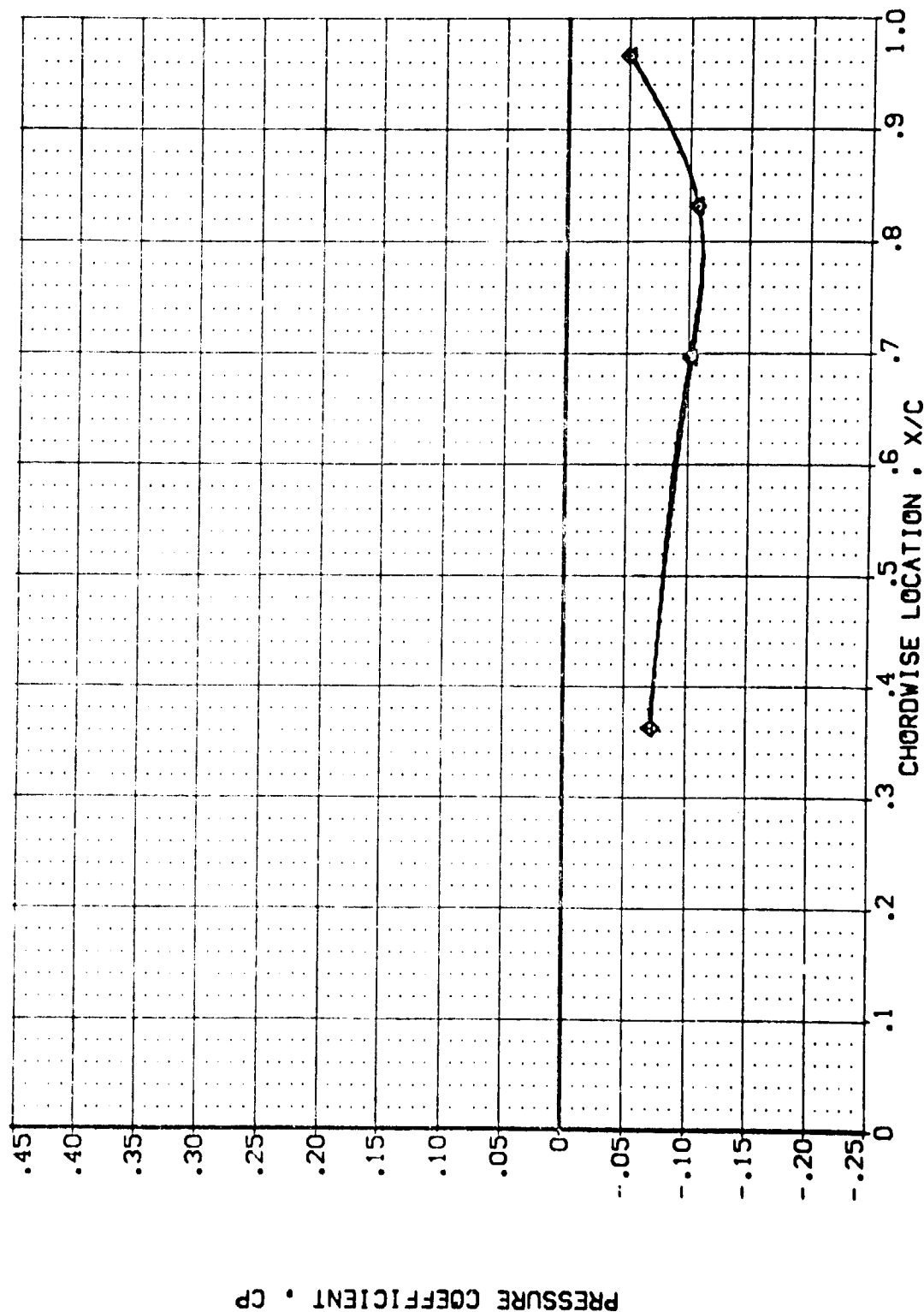
PAGE 588

DATA SET SYMBOL
 (UB2008)
 (UB2041)
 (UB2114)
 (UB2117)

CONFIGURATION DESCRIPTION
 ASES 87-710
 ASES 87-710
 ASES 87-710
 ASES 87-710

UPPER WING PRESSURE
 UPPER WING PRESSURE
 UPPER WING PRESSURE
 UPPER WING PRESSURE

POWER C/P R S/PFR GIMBAL
 .000
 26.860
 .768
 1.000
 26.850
 .768
 1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .299

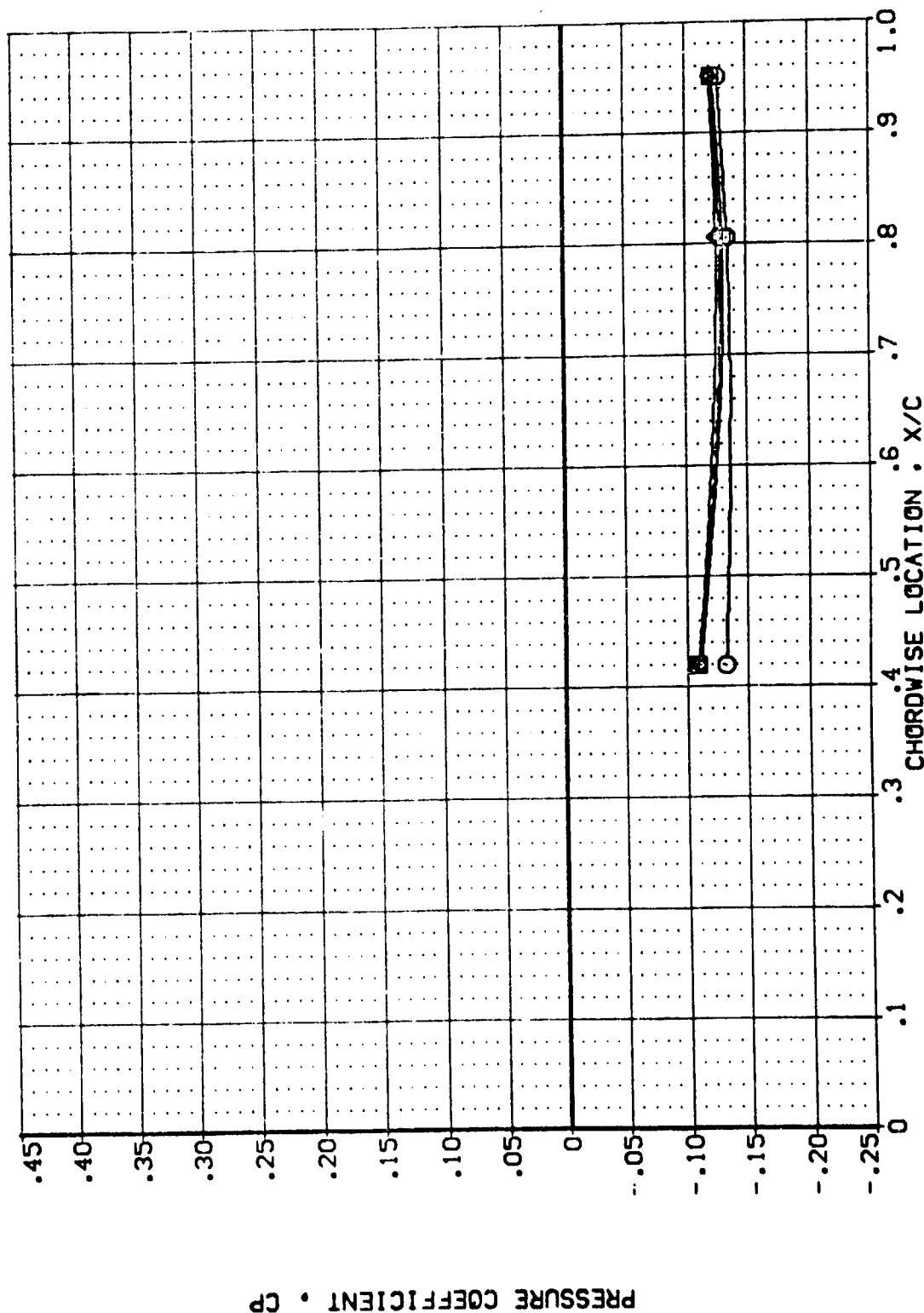
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER DPR SRPR GIMBAL

(UR2038) ASES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 26.860 .768 1.000

(UR2041) ASES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE 1.000 26.860 .768 1.000

(UR2114) ASES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE .000 26.860 .768 1.000

(UR2117) ASES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE 1.000 26.860 .768 1.000

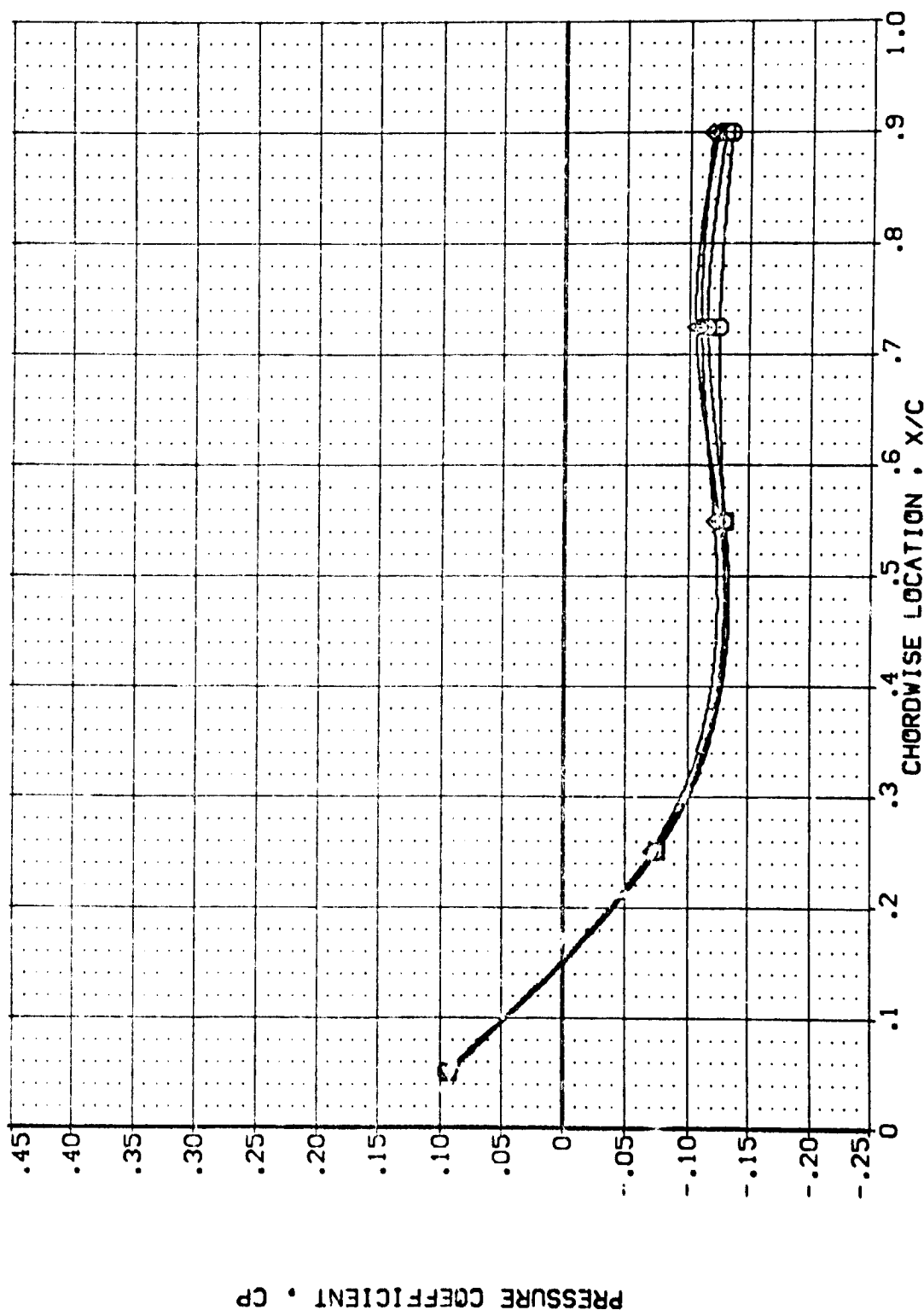


PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .427 PAGE 590

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2038)	AMES 87-710	IA12C	01	T1	S1	UPPER WING PRESSURE	POWER	OPR	SPRPR	GINMAL
(UB2041)	AMES 87-710	IA12C	01	T1	S1	UPPER WING PRESSURE	.000	26.860	.768	1.000
(UB2114)	AMES 87-710	IA12C	01	T1	S2	UPPER WING PRESSURE	1.000	26.860	.768	1.000
(UB2117)	AMES 87-710	IA12C	01	T1	S2	UPPER WING PRESSURE	1.000	26.860	.768	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

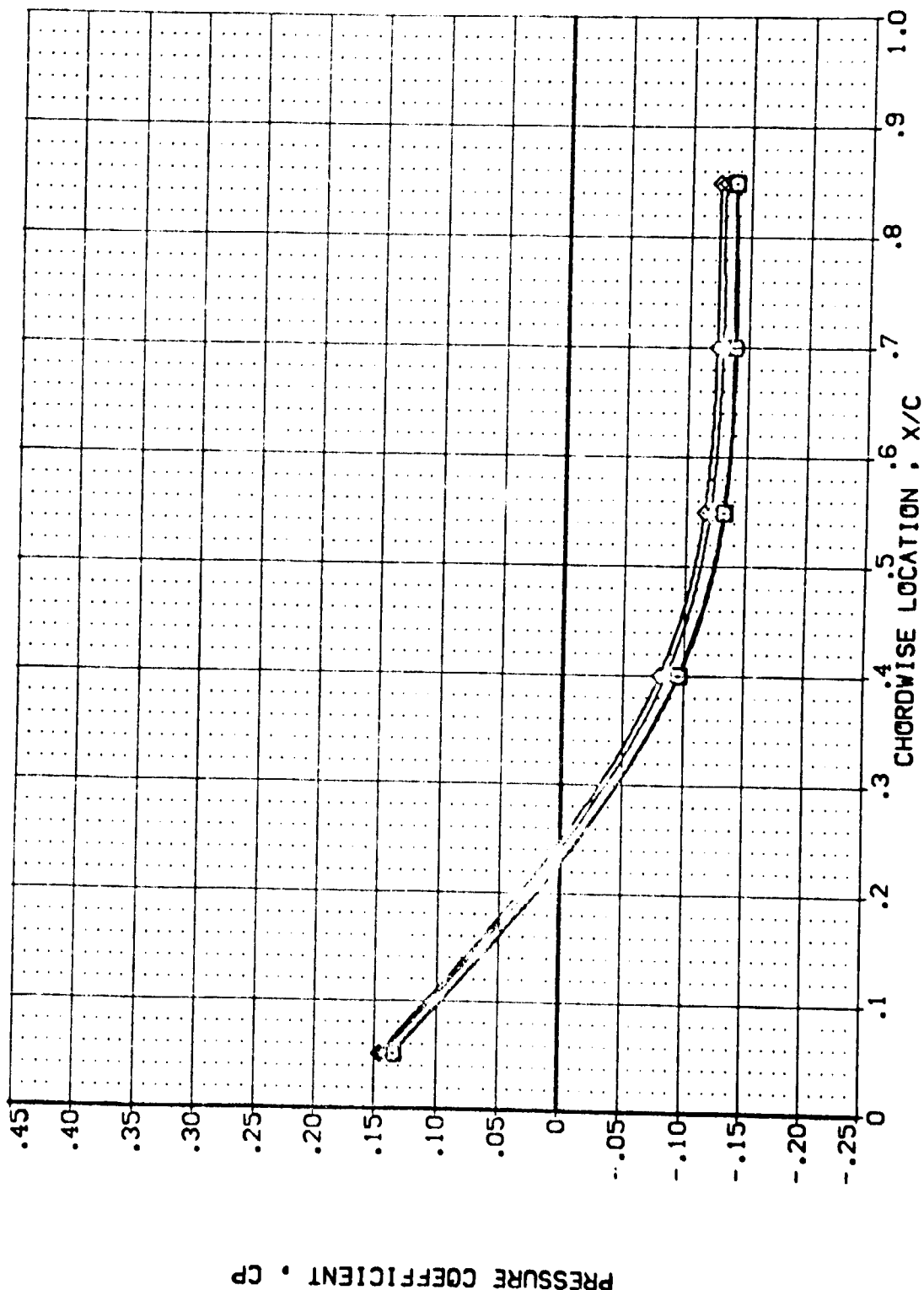
MACH = 3.000 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ008)
(UBZ041)
(UBZ114)
(UBZ117)

APES 87-710 IAI TC 01 T1 S1 UPPER WING PRESSURE
APES 87-710 IAI LC 01 T1 S1 UPPER WING PRESSURE
APES 87-710 IAI LC 01 T1 S2 UPPER WING PRESSURE
APES 87-710 IAI LC 01 T1 S2 UPPER WING PRESSURE

POWER 1.000
1.000
1.000
1.000
SR-PR .768
.768
GIMBAL 1.000
1.000
1.000
1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .673

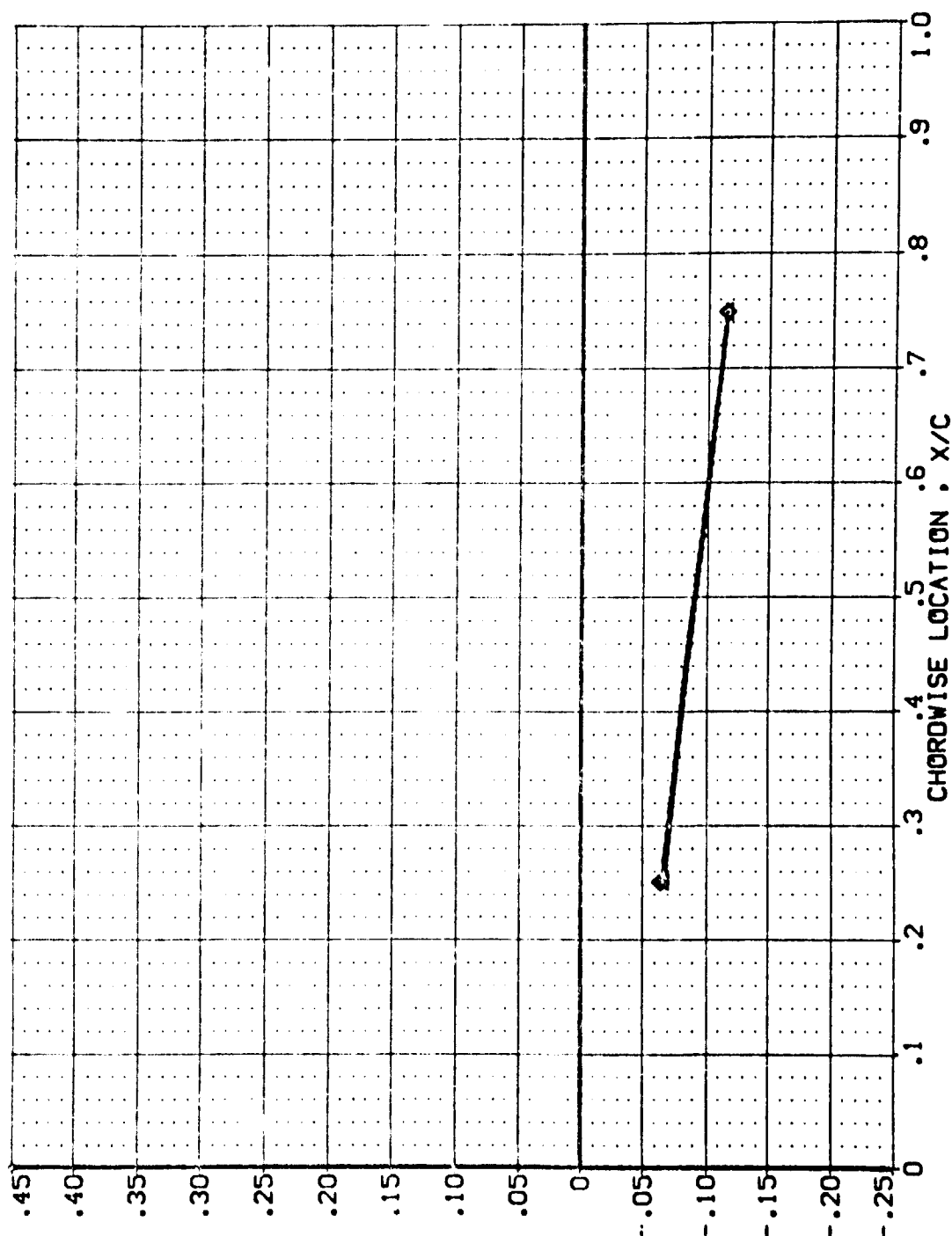
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER DPR SRPR GIMBAL

(UB2038) ARES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 26.860 .768 1.000

(UB2041) ARES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 26.860 .768 1.000

(UB2114) ARES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE .000 26.860 .768 1.000

(UB2117) ARES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE 1.000 26.860 .768 1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .780

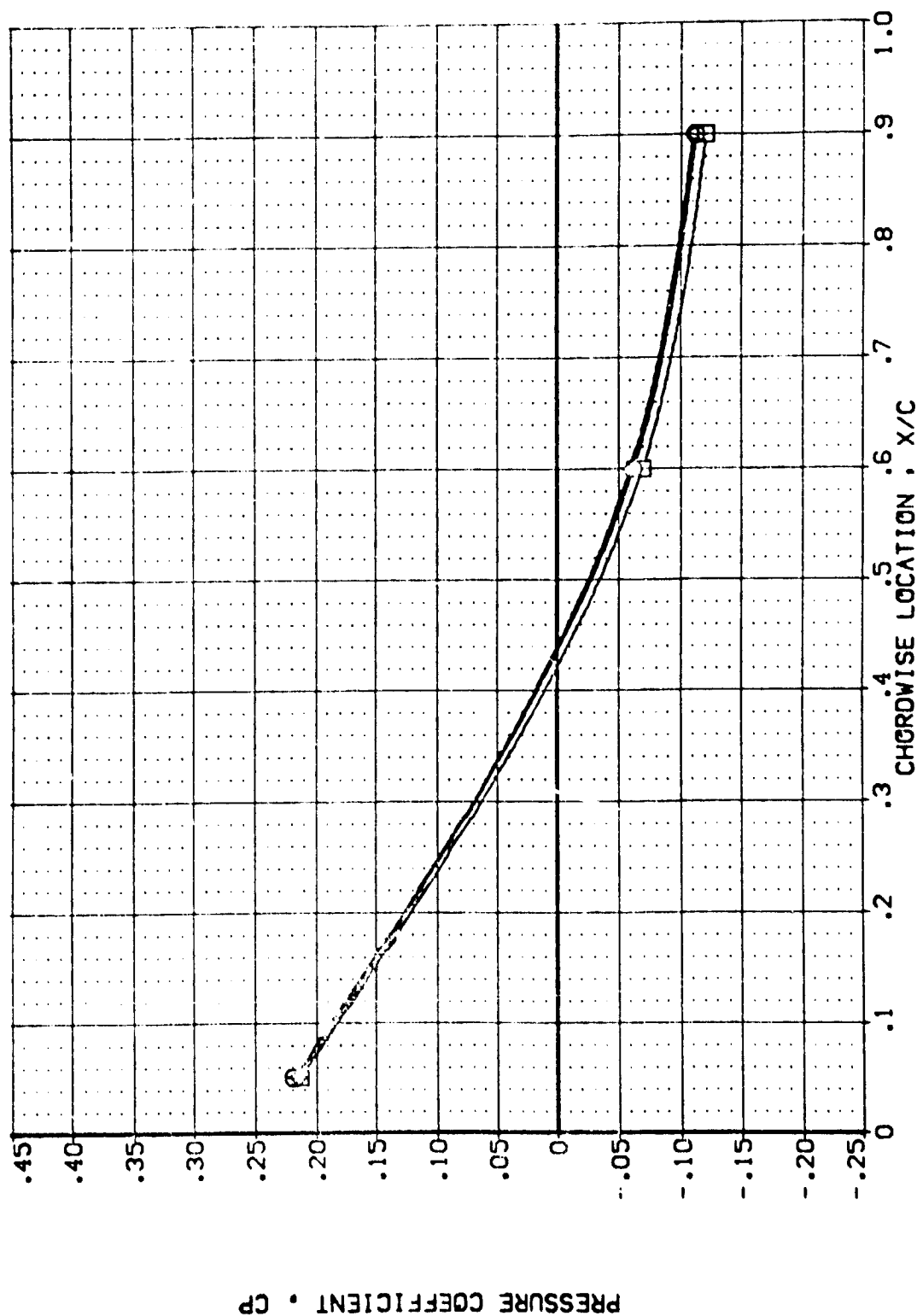
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER DPR SRPR GIMBAL

(UB2038) ARES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 26.860 .768 1.000

(UB2041) ARES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE 1.000 26.860 .768 1.000

(UB2114) ARES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE .000 26.860 .768 1.000

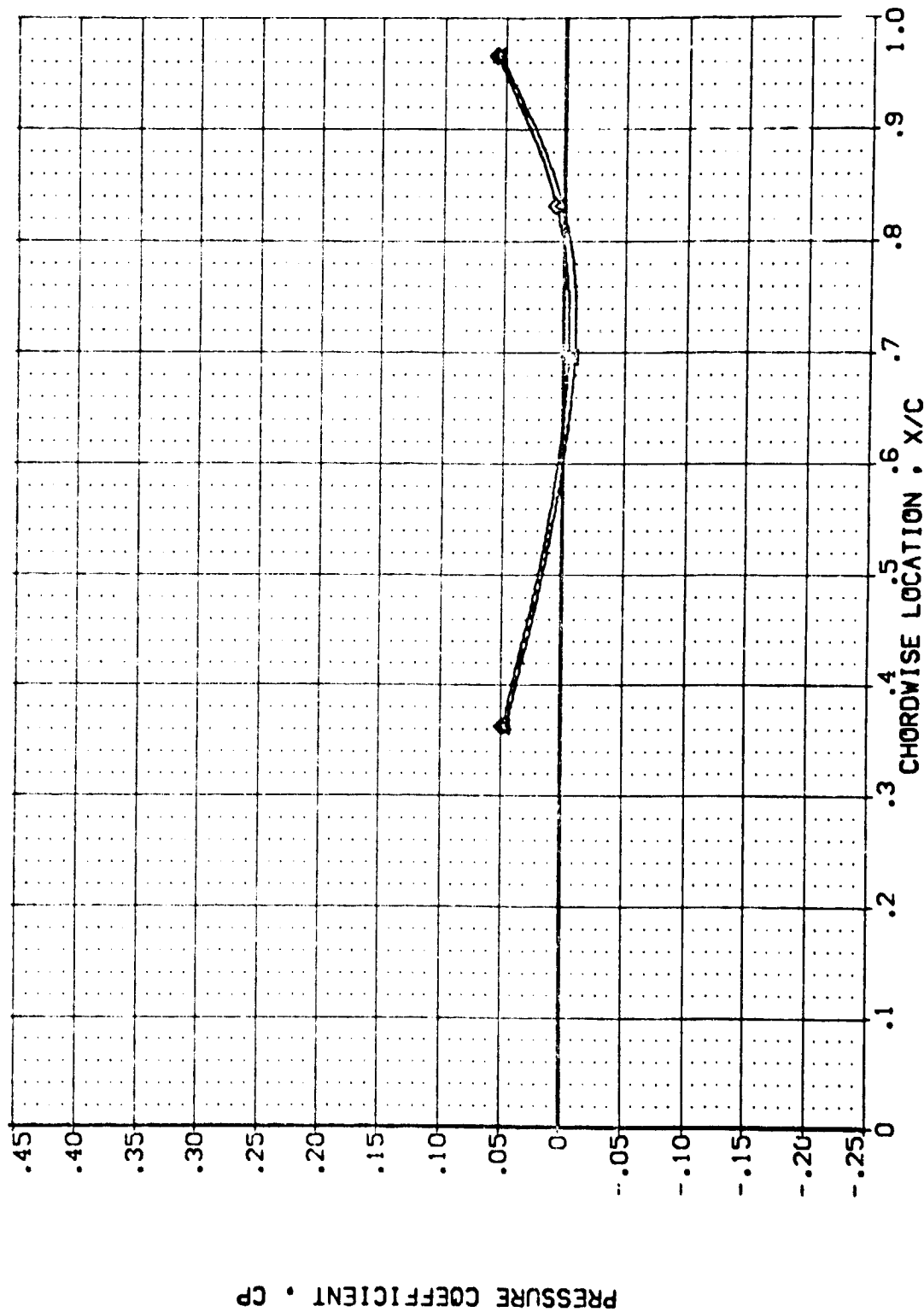
(UB2117) ARES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE 1.000 26.860 .768 1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	DR	SRPR	GIMBAL
(UBZD46)	AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	.000			1.000
(UBZD50)	AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UBZ118)	AMES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE	1.000			1.000
(UBZ121)	AMES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE	1.000	23.960	.826	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .299

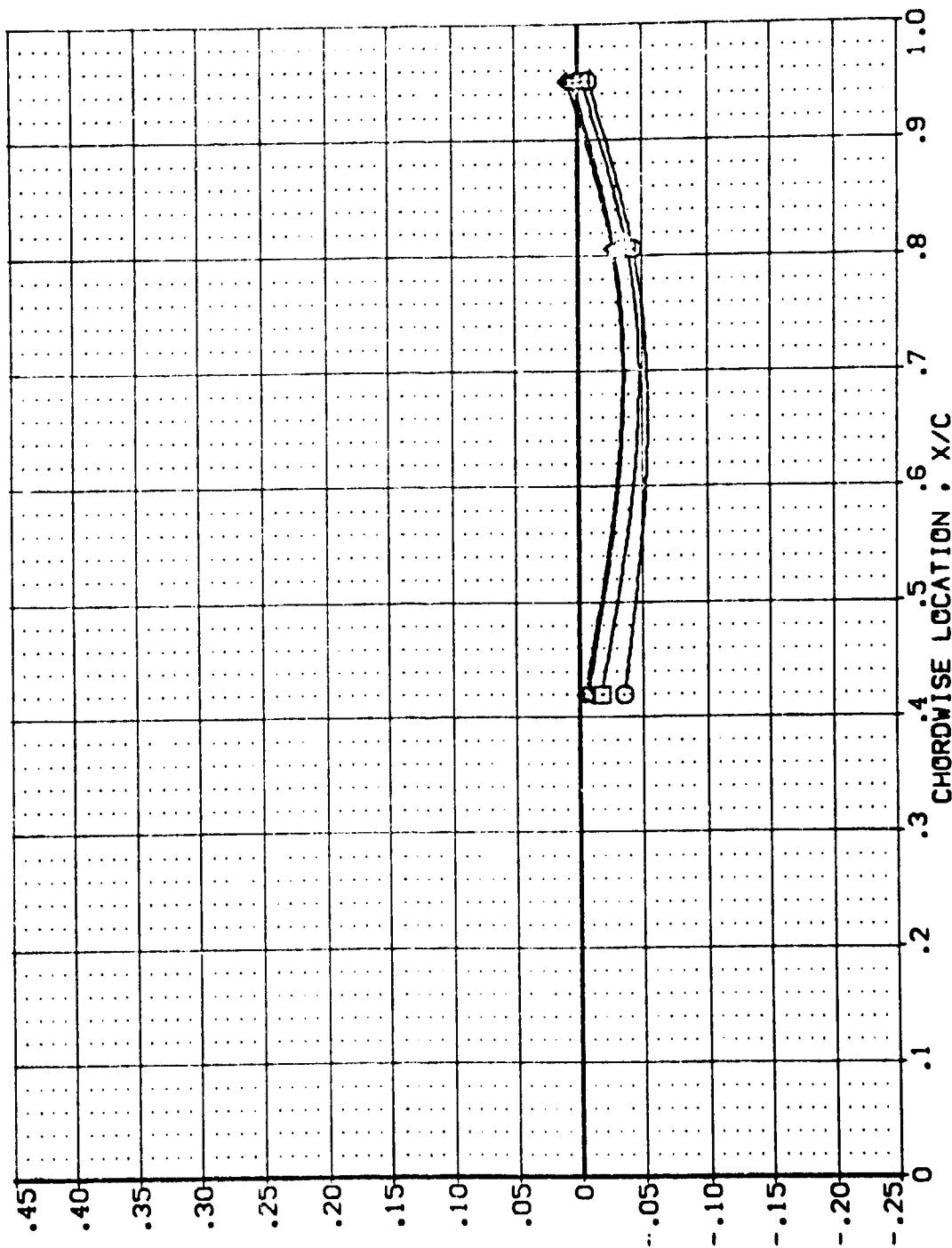
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ045)
(UBZ050)
(UBZ118)
(UBZ121)

AVES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IALZC 01 T1 S2 UPPER WING PRESSURE
AVES 87-710 IALZC 01 T1 S2 UPPER WING PRESSURE

POWER 0.000
OPR 23.860
SRPR .826
GIMBA 1.000
1.000
1.000
1.000

PRESSURE COEFFICIENT - CP



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

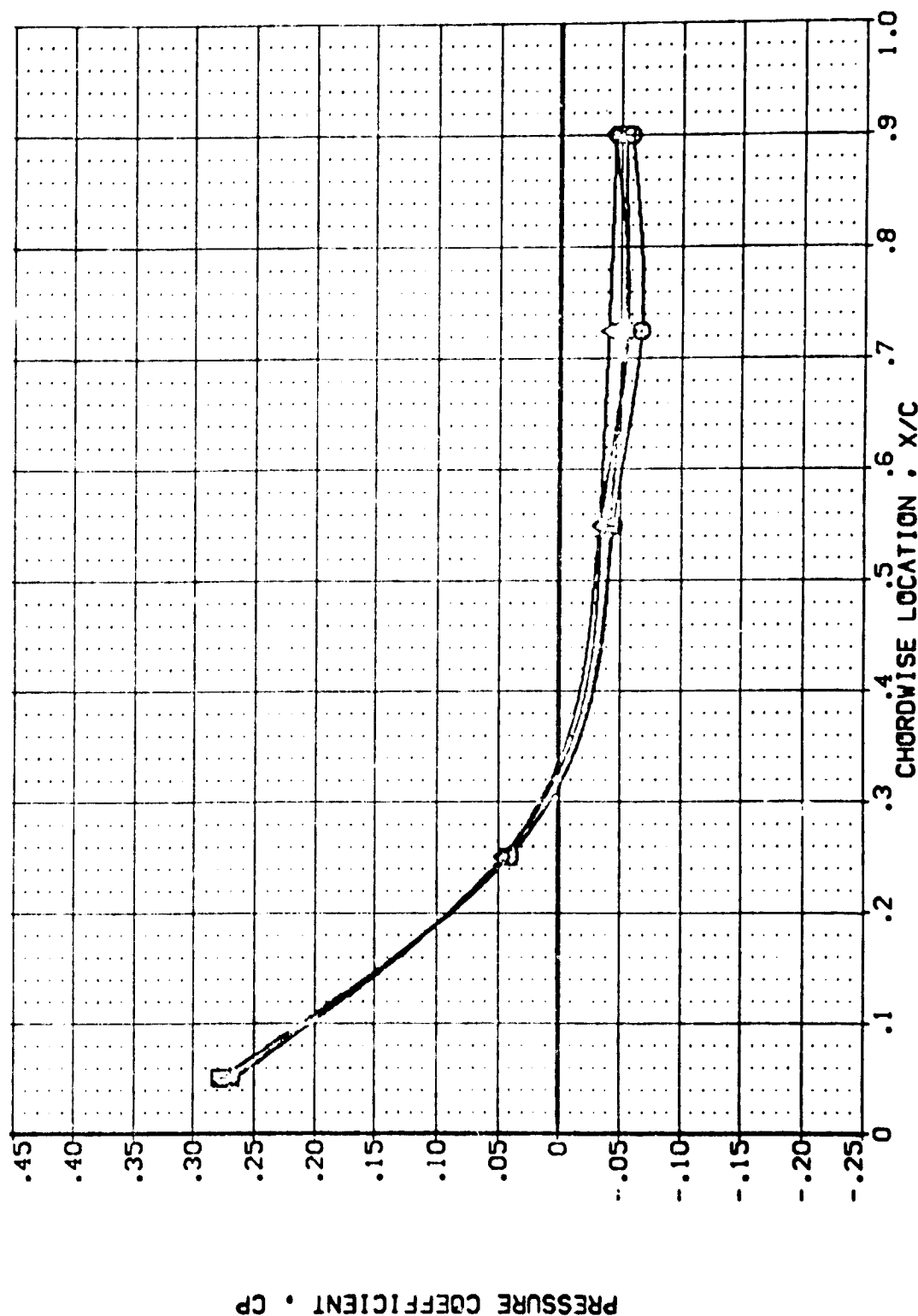
MACH = 3.500 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL
(U3Z016)
(U3Z050)
(U3Z118)
(U3Z121)

CONFIGURATION DESCRIPTION
AMES B7-710 IAL2C 01 T1 S1
AMES B7-710 IAL2C 01 T1 S1
AMES B7-710 IAL2C 01 T1 S2
AMES B7-710 IAL2C 01 T1 S2

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER QPR SPPR GIMBAL
.000 23.860 .826 1.000
1.000 23.860 .826 1.000
1.000 23.860 .826 1.000

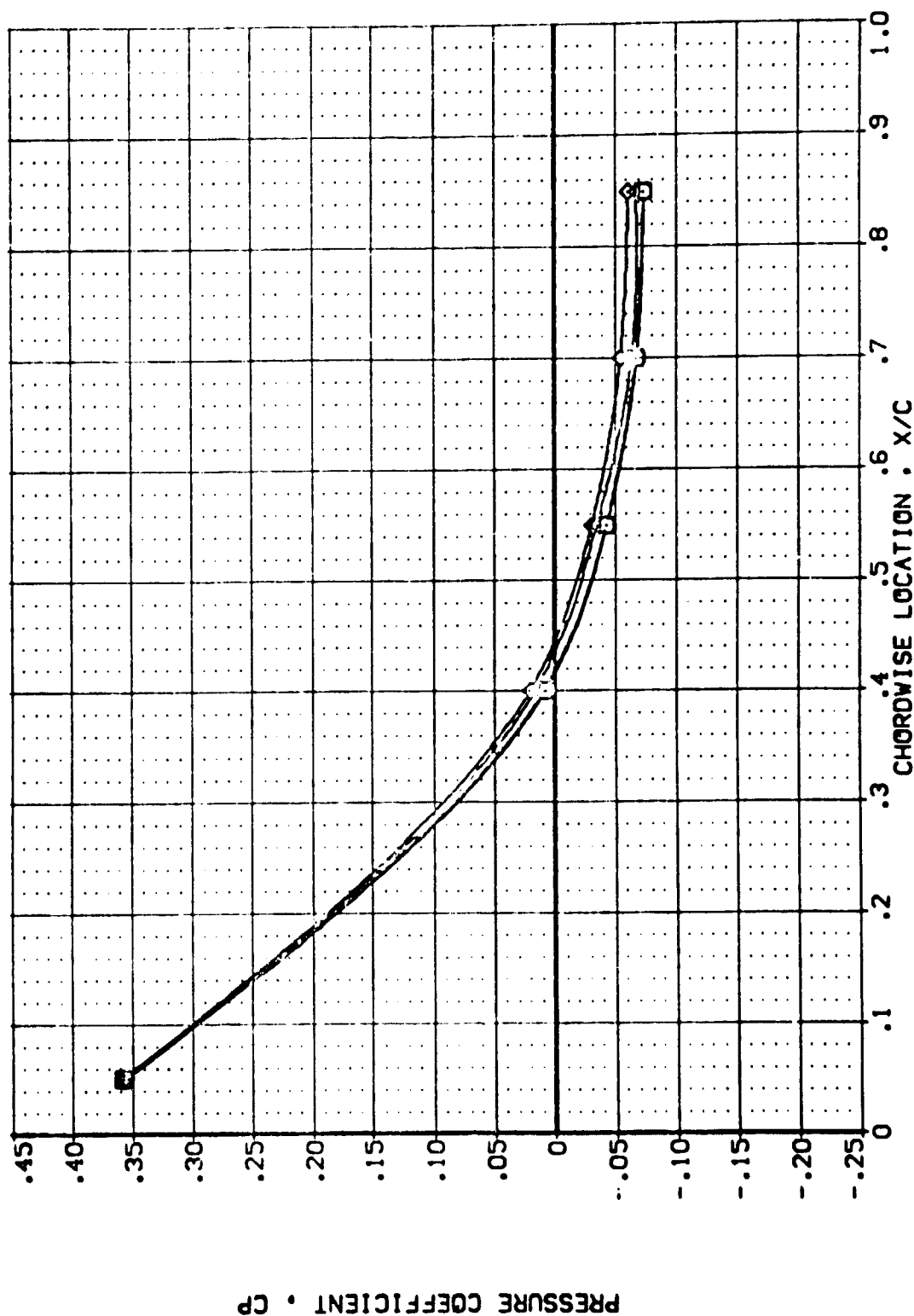


PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TCP

MACH = 3.500 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2046)	AVES 87-710	IA12C 01 T1 S1	UPPER WING PRESSURE	POWER	OPR	SR-PR	GIMBAL
(UB2050)	AVES 87-710	IA12C 01 T1 S1	UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UB2118)	AVES 87-710	IA12C 01 T1 S2	UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UB2121)	AVES 87-710	IA12C 01 T1 S2	UPPER WING PRESSURE	1.000	23.860	.826	1.000

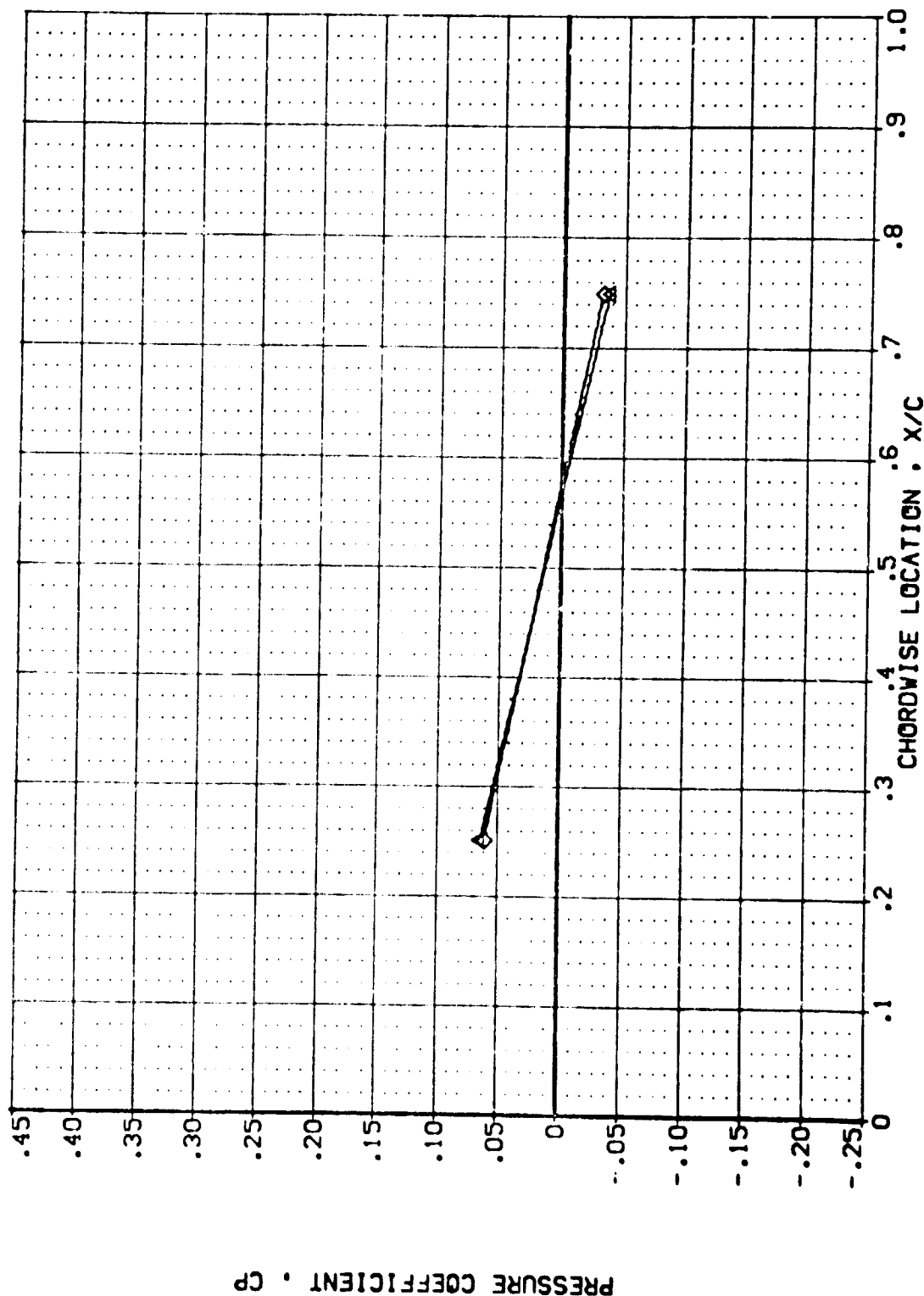


PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .673

PAGE 598

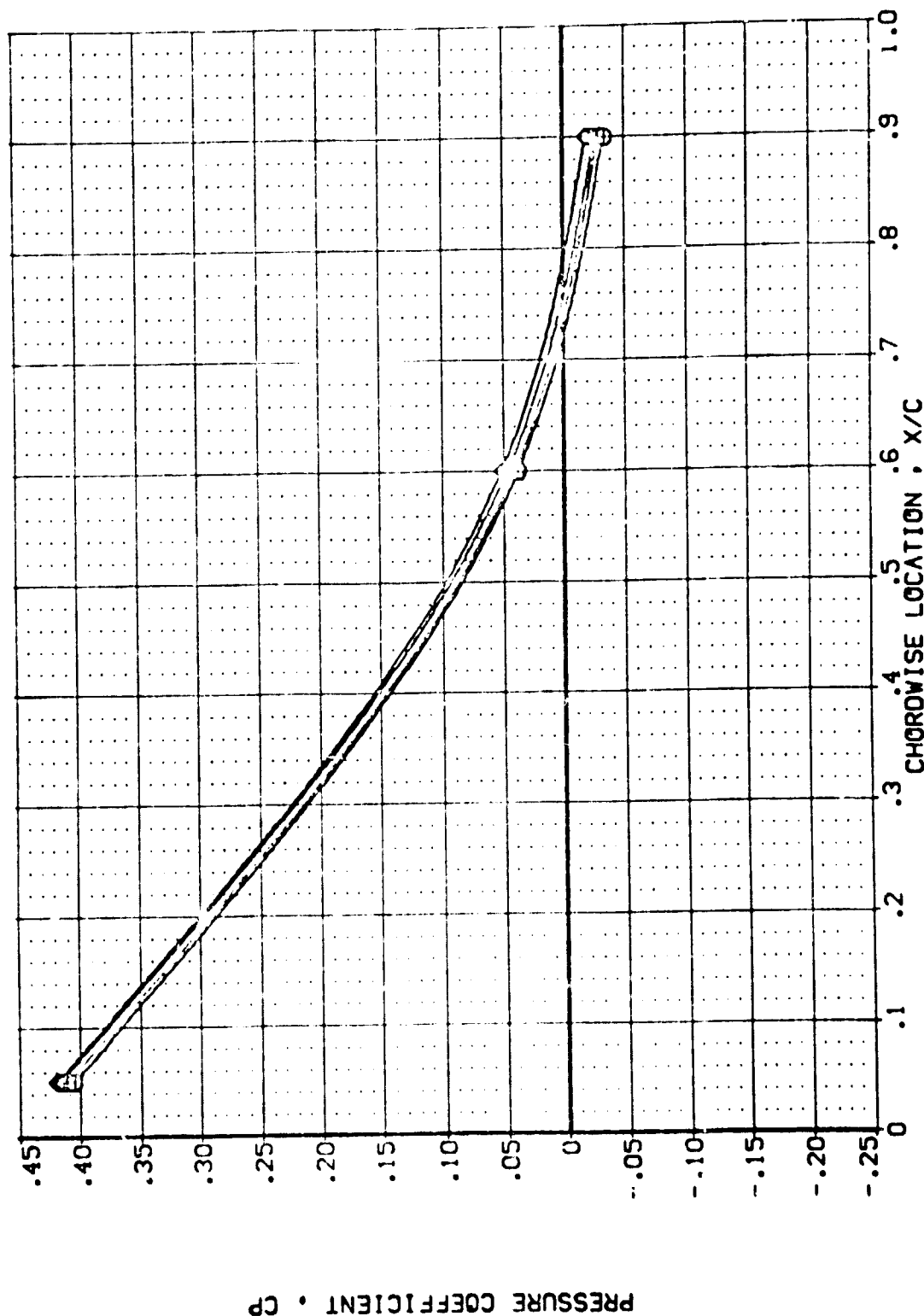
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SRPR	GINBAL
(UBZ046)	APES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE	.000			1.000
(UBZ050)	APES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UBZ118)	APES 87-710 IALZC 01 T1 S2 UPPER WING PRESSURE	.000			1.000
(UBZ121)	APES 87-710 IALZC 01 T1 S2 UPPER WING PRESSURE	1.000	23.860	.826	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .780

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SRPR	GIMBAL
(UJ2046)	AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	.000			1.000
(UJ2050)	AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UJ2118)	AVES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE	1.000			1.000
(UJ2121)	AVES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE	1.000	23.860	.826	1.000

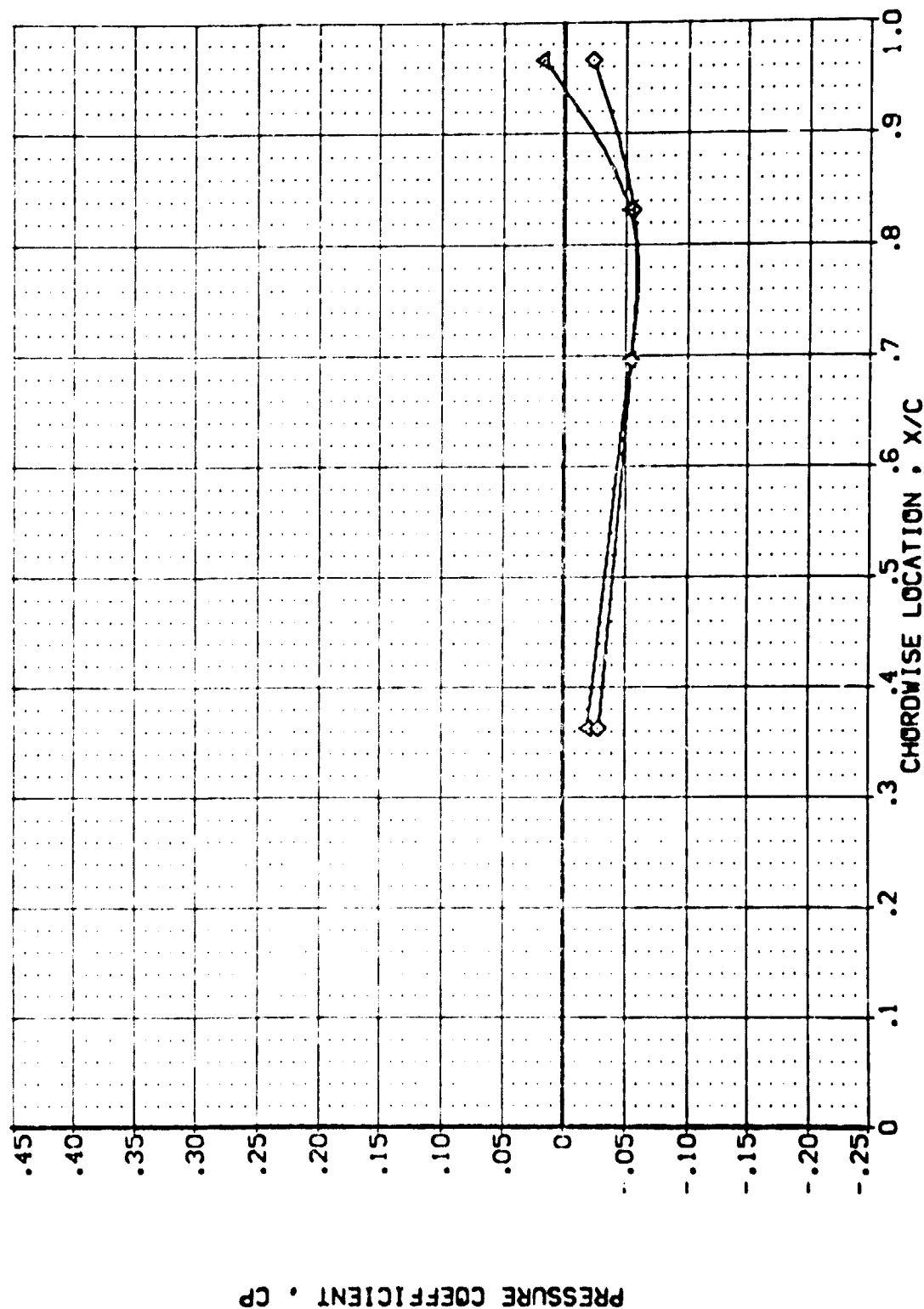


PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .887

PAGE 600

DATA SET SYMBL	CONFIGURATION DESCRIPTION	POWER	DPR	SPR	GIMBAL
(UB7046)	AVES 87-710 [A]2C 01 T1 S1 UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UB7050)	AVES 87-710 [A]2C 01 T1 S1 UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UB7110)	AVES 87-710 [A]2C 01 T1 S2 UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UB7121)	AVES 87-710 [A]2C 01 T1 S2 UPPER WING PRESSURE	1.000	23.860	.826	1.000



PLUME AND SR8 POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .299

DATA SET SYMBOL

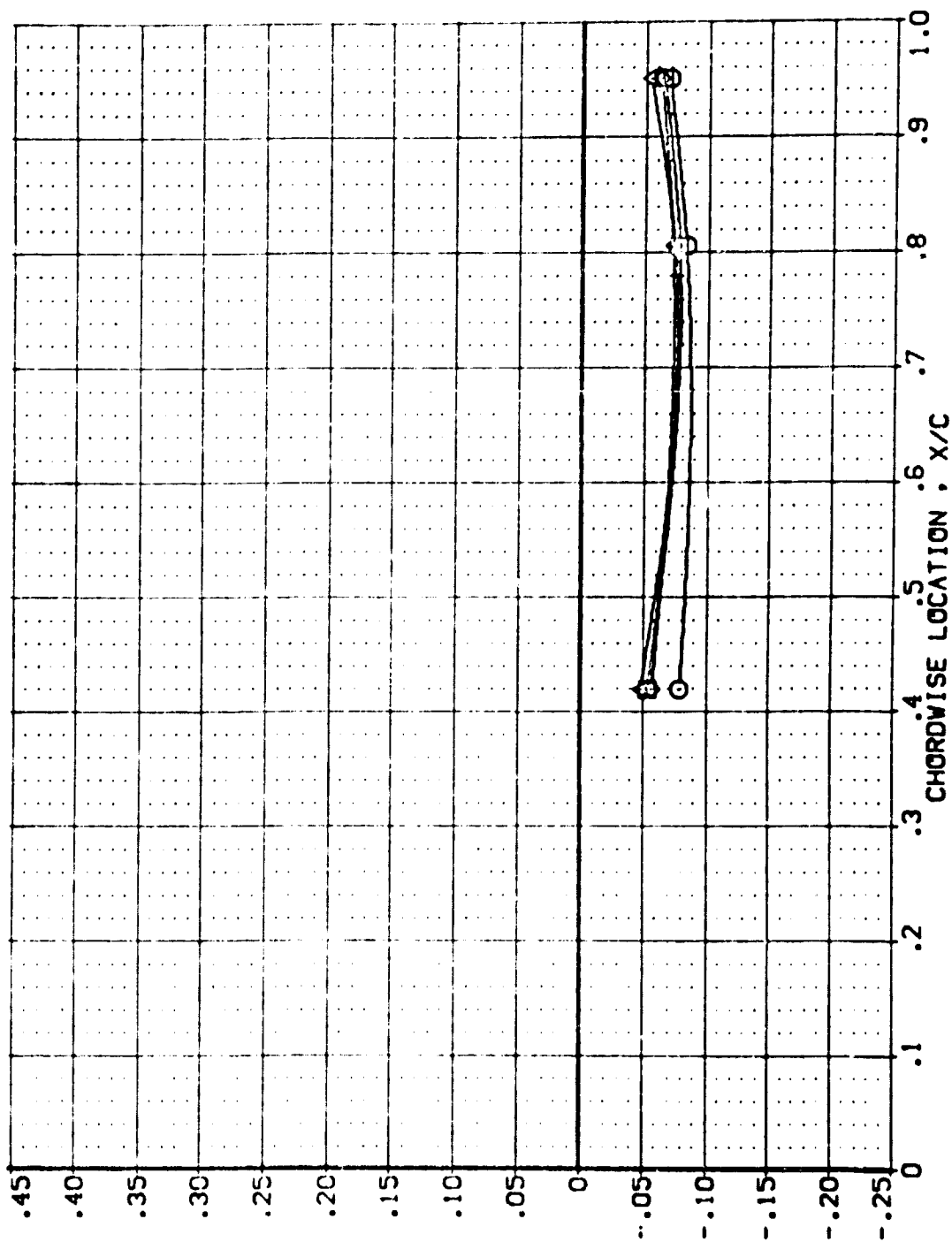
(UB2046)
(UB2050)
(UB2118)
(UB2121)

CONFIGURATION DESCRIPTION

AVES 87-710 IALIC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IALIC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IALIC 01 T1 S2 UPPER WING PRESSURE
AVES 87-710 IALIC 01 T1 S2 UPPER WING PRESSURE

POWER .000
OPR 23.860
SWPR .8C6
GIMBAL 1.000

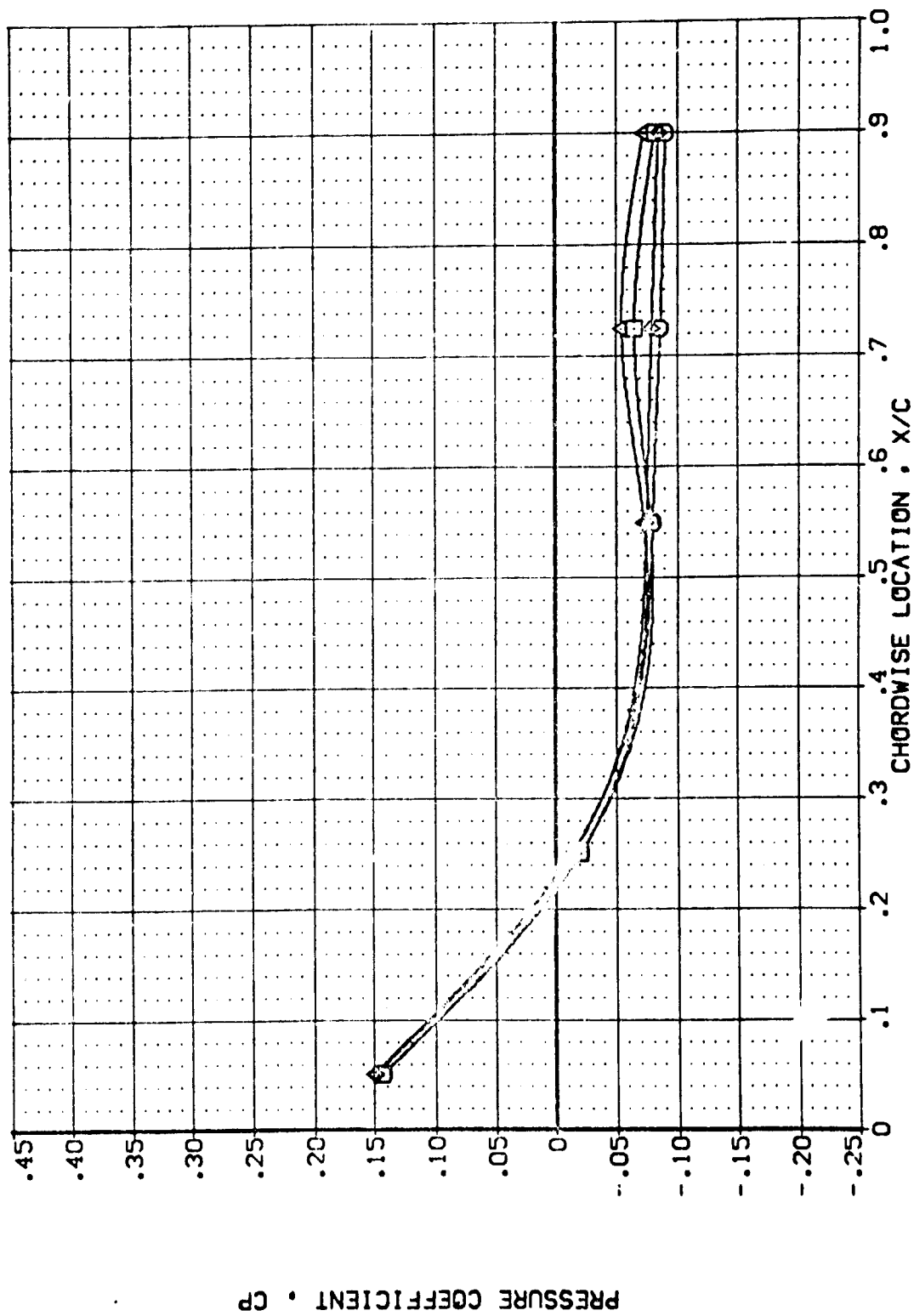
PRESSURE COEFFICIENT • CP



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .427

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	QPR	SRPR	GIMBAL
(UBZ046)	ANES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	.000			1.000
(UBZ050)	ANES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UBZ119)	ANES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE	.000			1.000
(UBZ121)	ANES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE	1.000	23.860	.826	1.000



PLUME AND SR3 POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .534

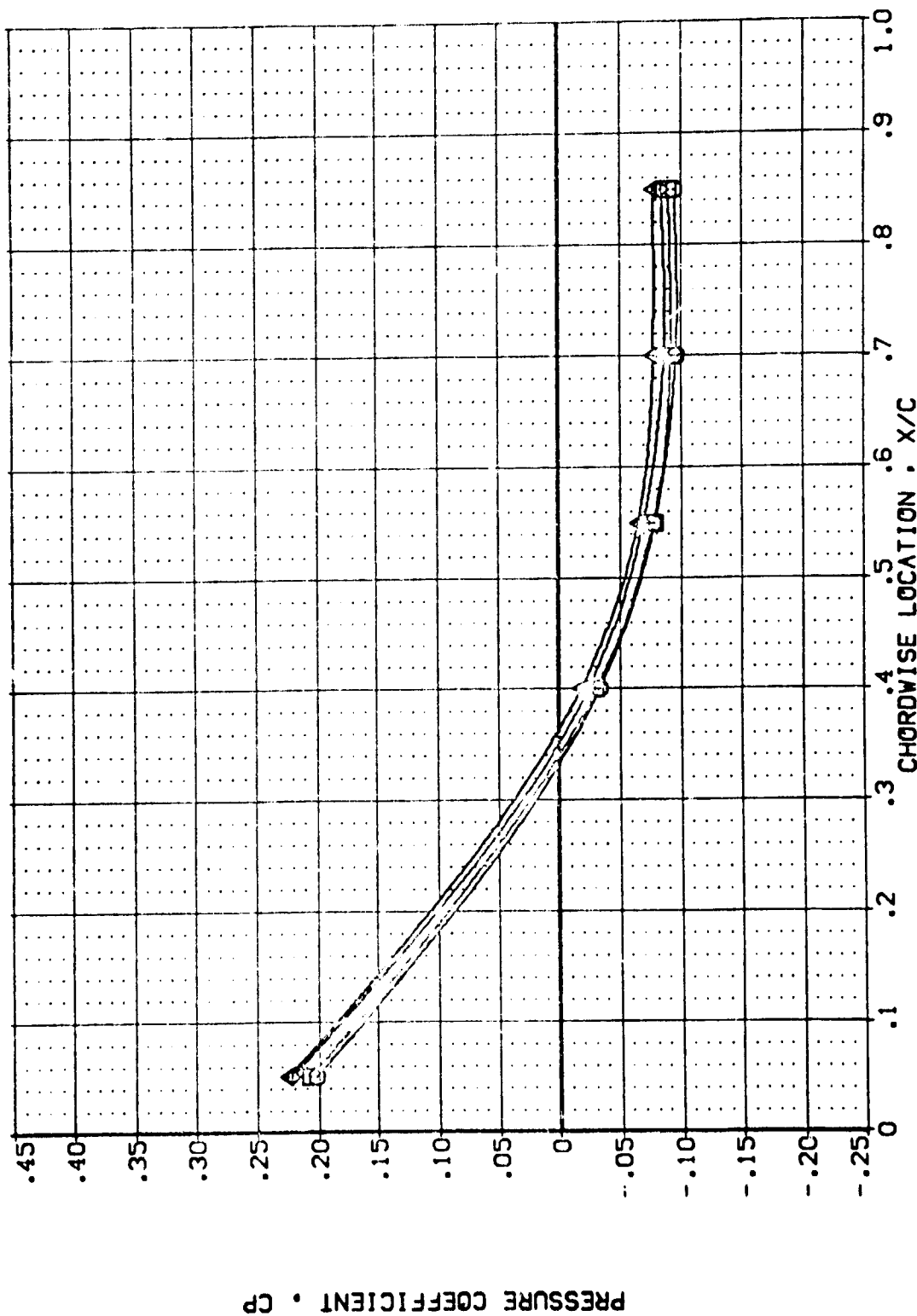
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CDR SMR GINBAL

(UBZ046) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 23.860 .826 1.000

(UBZ050) AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE 1.000 23.860 .826 1.000

(UBZ118) AVES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE .000 23.860 .826 1.000

(UBZ121) AVES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE 1.000 23.860 .826 1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .673 PAGE 604

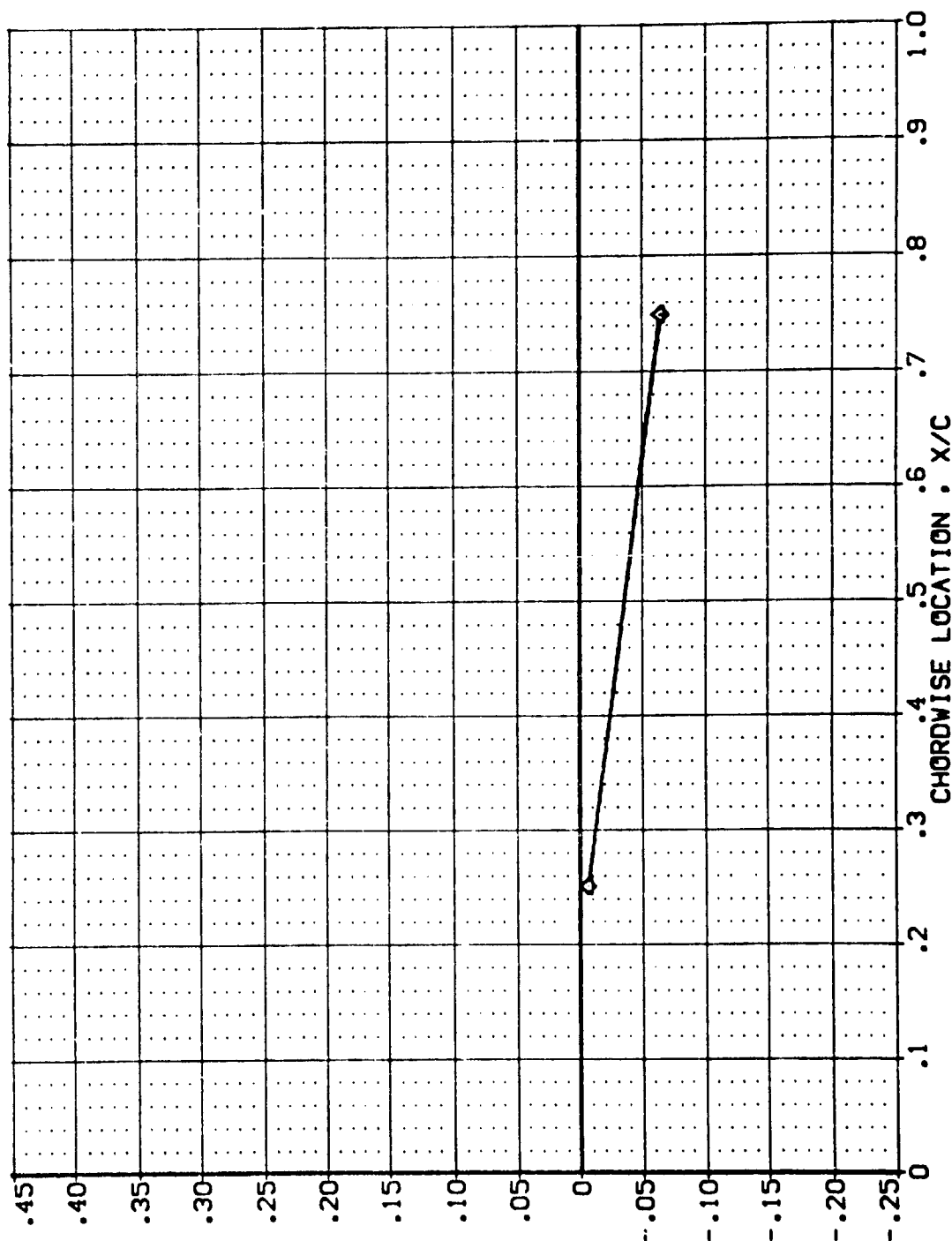
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CPR SR-PR GINGAL

(UB2046) ARES 87-710 IA12C 01 T1 S1 UPPER WING PRESSURE .000 23.860 .826 1.000

(UB2050) ARES 87-710 IA12C 01 T1 S1 UPPER WING PRESSURE 1.000 23.860 .826 1.000

(UB2118) ARES 87-710 IA12C 01 T1 S2 UPPER WING PRESSURE .000 23.860 .826 1.000

(UB2121) ARES 87-710 IA12C 01 T1 S2 UPPER WING PRESSURE 1.000 23.860 .826 1.000

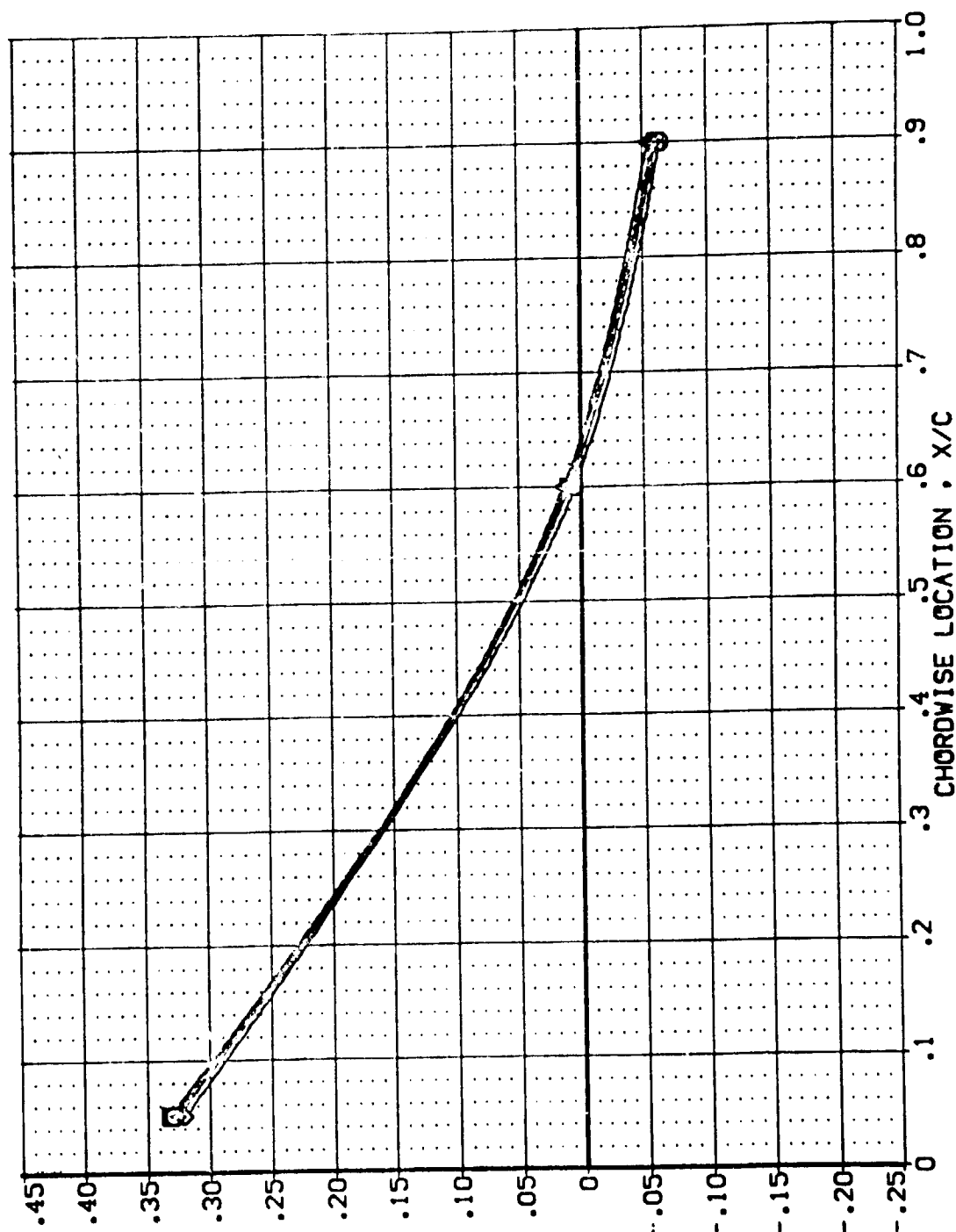


PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

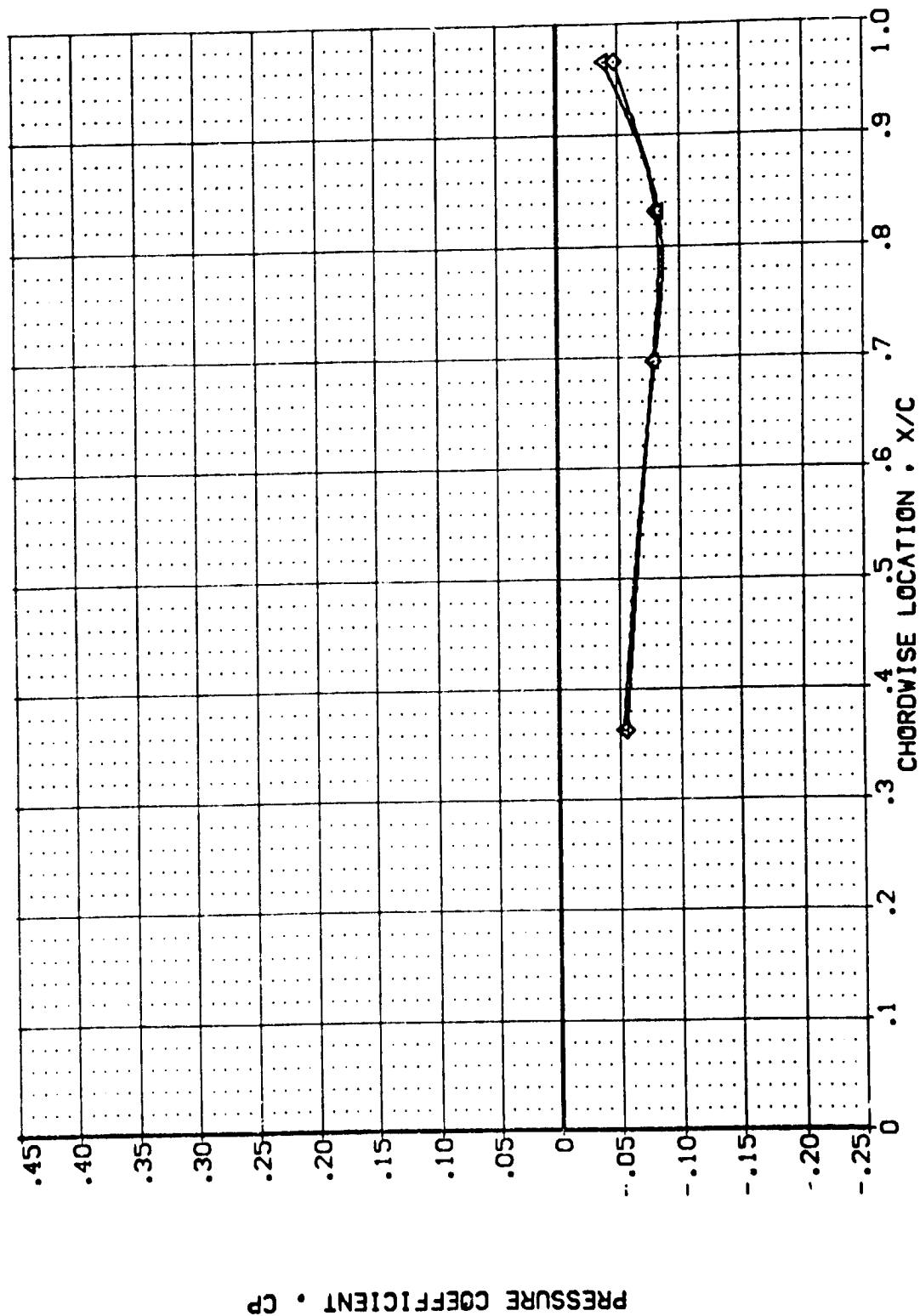
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CPR	SR-PR	GIMBAL
(UBZ045)	AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UBZ050)	AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UBZ118)	AVES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UBZ121)	AVES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE	1.000	23.860	.826	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .887

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SWPR	GIMBAL
(UBZ046)	AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE	.000			1.000
(UBZ050)	AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UBZ118)	AVES 87-710 1A12C 01 T1 S2 UPPER WING PRESSURE	1.000			1.000
(UBZ121)	AVES 87-710 1A12C 01 T1 S2 UPPER WING PRESSURE	1.000	23.860	.826	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL
(UB2046)
(UB2050)
(UB2118)
(UB2121)

CONFIGURATION DESCRIPTION
AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

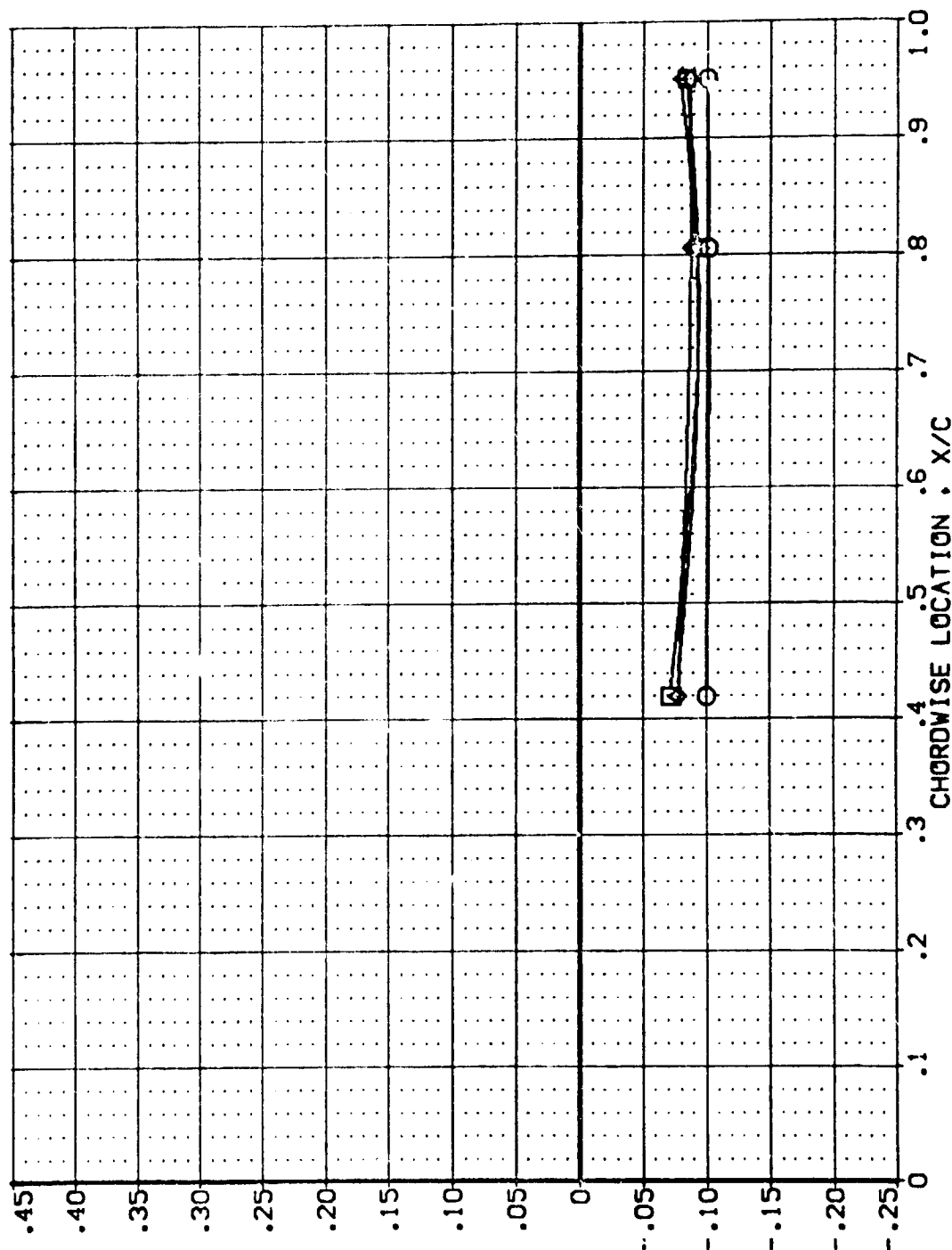
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER
.000
1.000
.000
1.000

CPR
23.860
23.860

SRPR
.826
.826

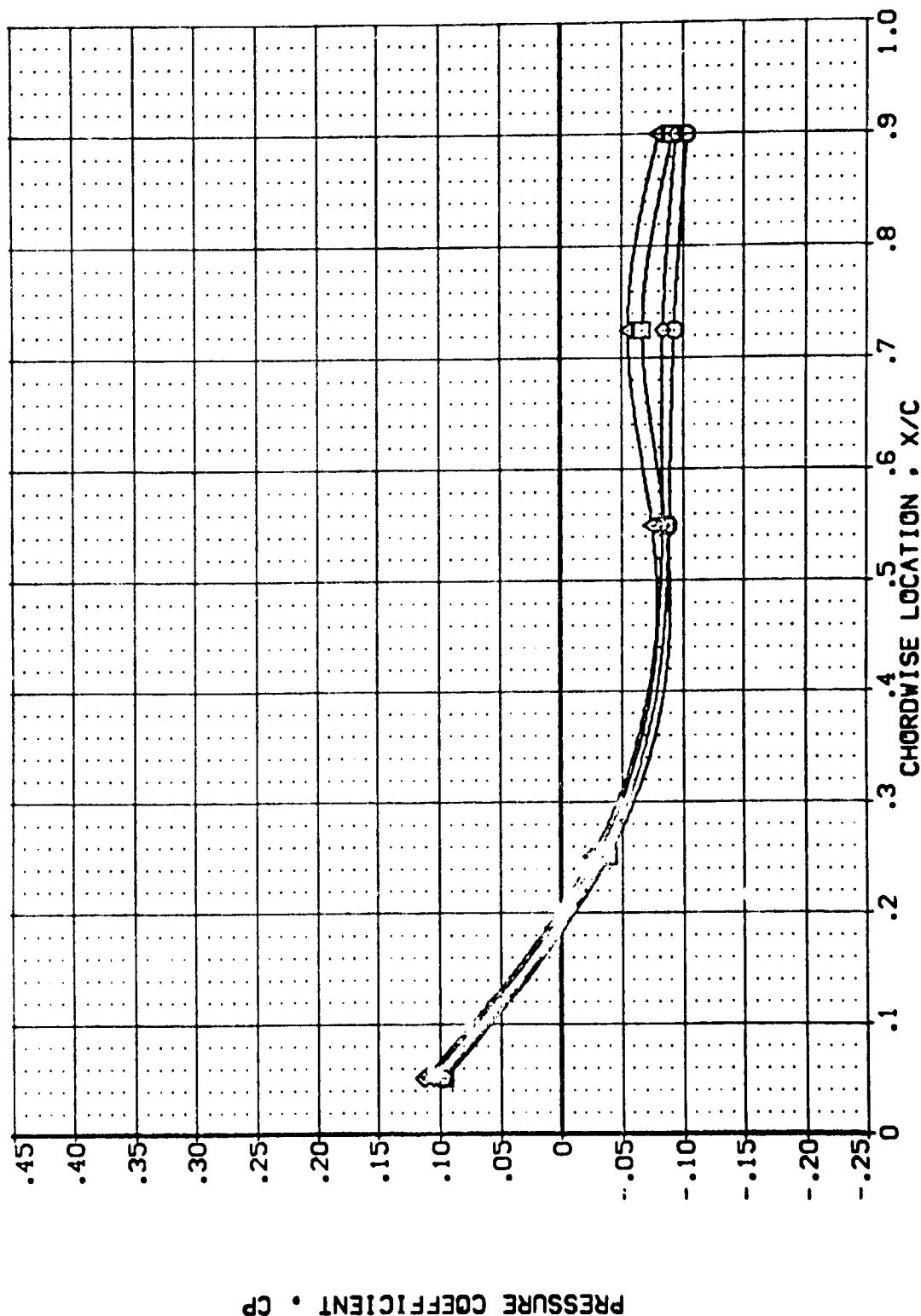
GIMBAL
1.000
1.000
1.000
1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .427

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SWPR	GIMBAL
(UBZ046)	AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	.000			1.000
(UBZ050)	AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE	1.000	23.860	.826	1.000
(UBZ118)	AVES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE	.000			1.000
(UBZ121)	AVES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE	1.000	23.860	.826	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

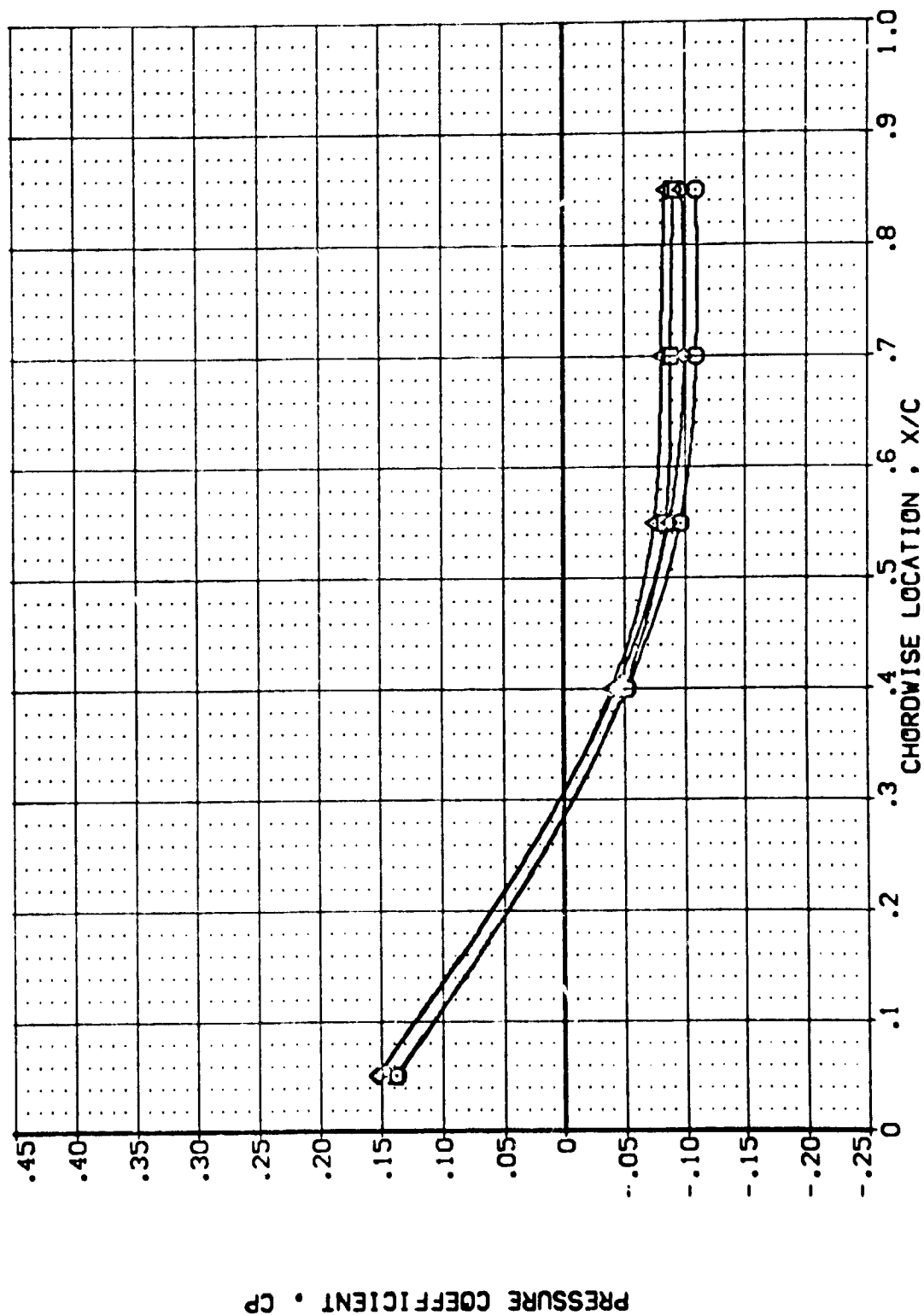
MACH = 3.500 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ04G)	AVES 87-710	IA12C 01	T1 S1	UPPER WING PRESSURE
(UBZ050)	AVES 87-710	IA12C 01	T1 S1	UPPER WING PRESSURE
(UBZ118)	AVES 87-710	IA12C 01	T1 S2	UPPER WING PRESSURE
(UBZ121)	AVES 87-710	IA12C 01	T1 S2	UPPER WING PRESSURE

POWER ORR SRPR GIMBAL

.000	23.850	.826	1.000
1.000	23.850	.826	1.000
1.000	23.850	.826	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .673

PAGE 610

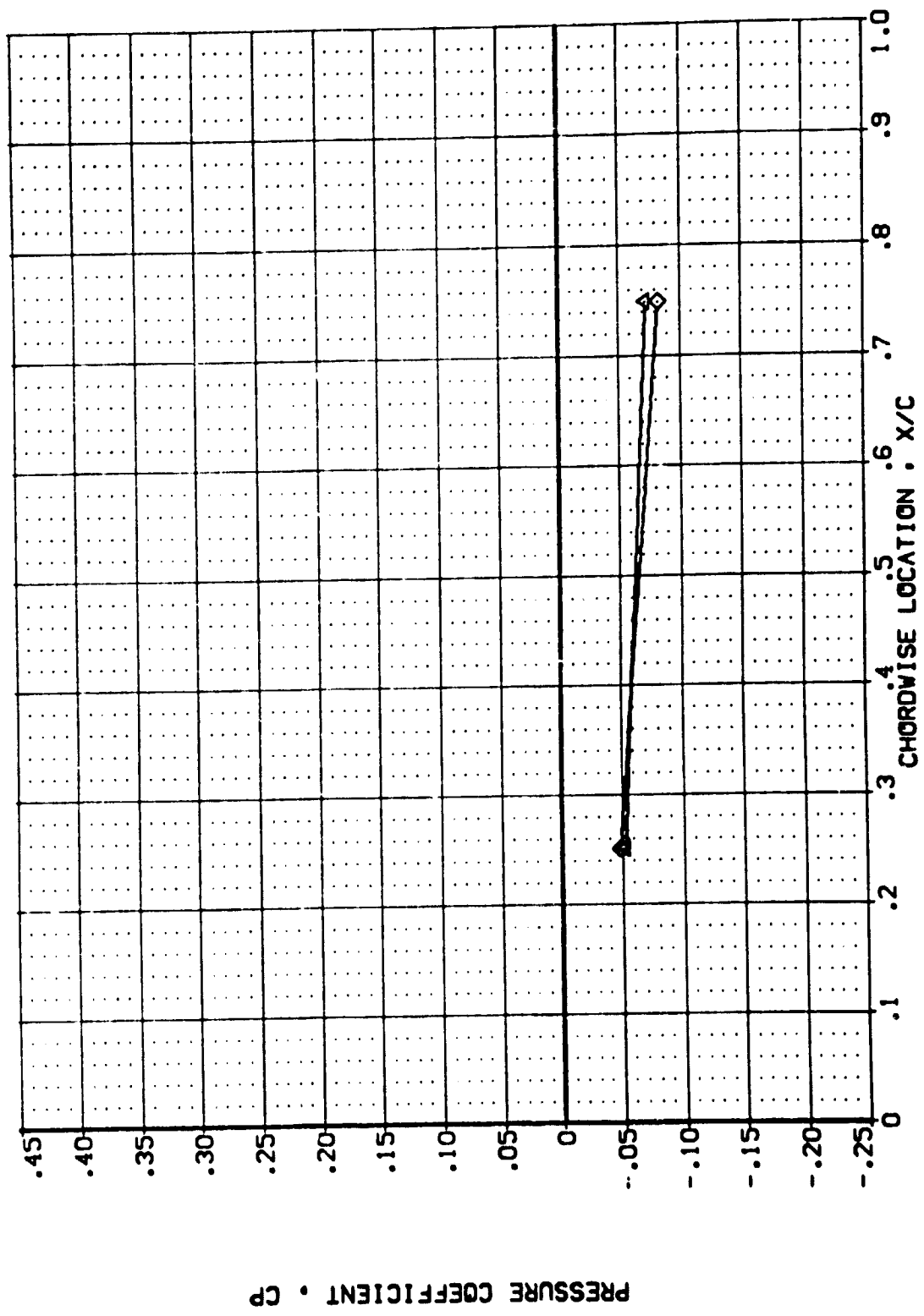
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CPR SPWR 01MBAL

(UBZ046) ASES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 23.860 .826 1.000

(UBZ050) ASES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE 1.000 23.860 .826 1.000









(UBZ118) ASES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE .000 23.860 .826 1.000

(UBZ121) ASES 87-710 IAI2C 01 T1 S2 UPPER WING PRESSURE 1.000 23.860 .826 1.000



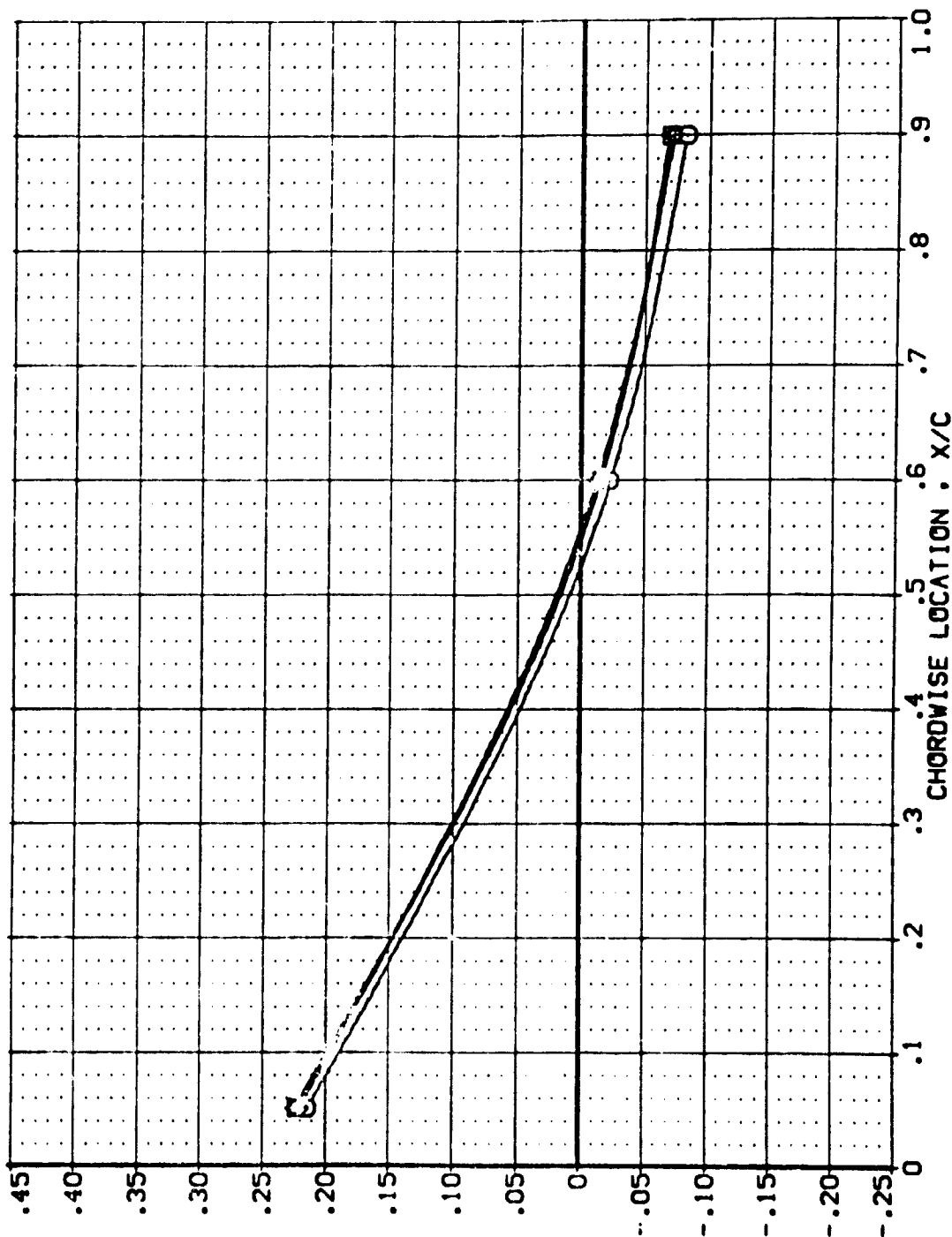
PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB70M6)  
 (UB70S0)  
 (UB7110)  
 (UB7121)  

AVES 07-710 IAL2C 01 T1 S1 UPPER WING PRESSURE
 AVES 07-710 IAL2C 01 T1 S1 UPPER WING PRESSURE
 AVES 07-710 IAL2C 01 T1 S2 UPPER WING PRESSURE
 AVES 07-710 IAL2C 01 T1 S2 UPPER WING PRESSURE

POWER GPR SRPR GIBAL
 .000 23.860 .826 1.000
 1.000 23.860 .826 1.000
 1.000 23.860 .826 1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .687

DATA SET SYMBOL

(LBZ038)
(LBZ041)
(LBZ114)
(LBZ117)

CONFIGURATION DESCRIPTION

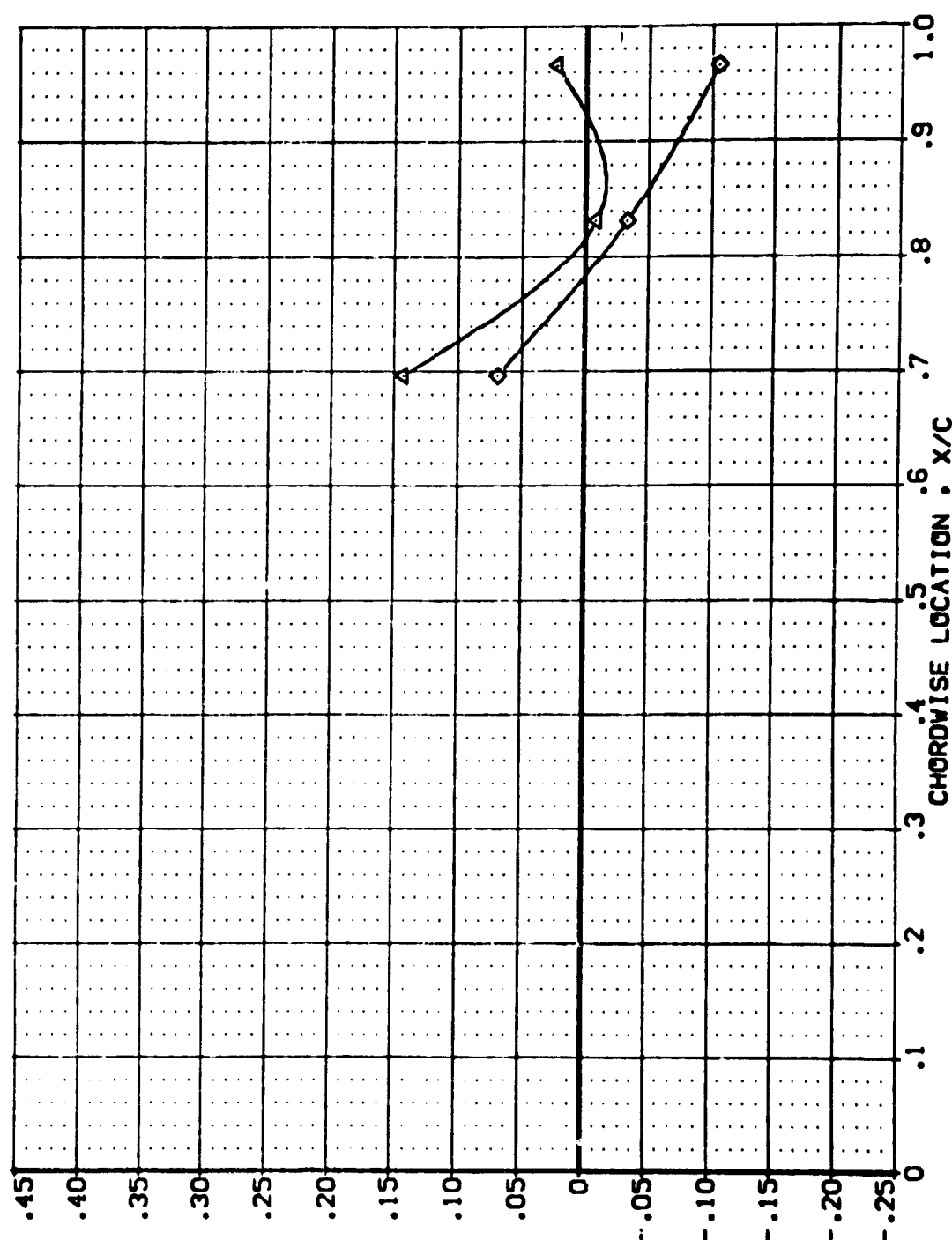
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE

POWER 0.000
0.000
0.000
0.000

SRPR 0.768
0.768
0.768
0.768

GIMBAL 1.000
1.000
1.000
1.000

PRESSURE COEFFICIENT, CP

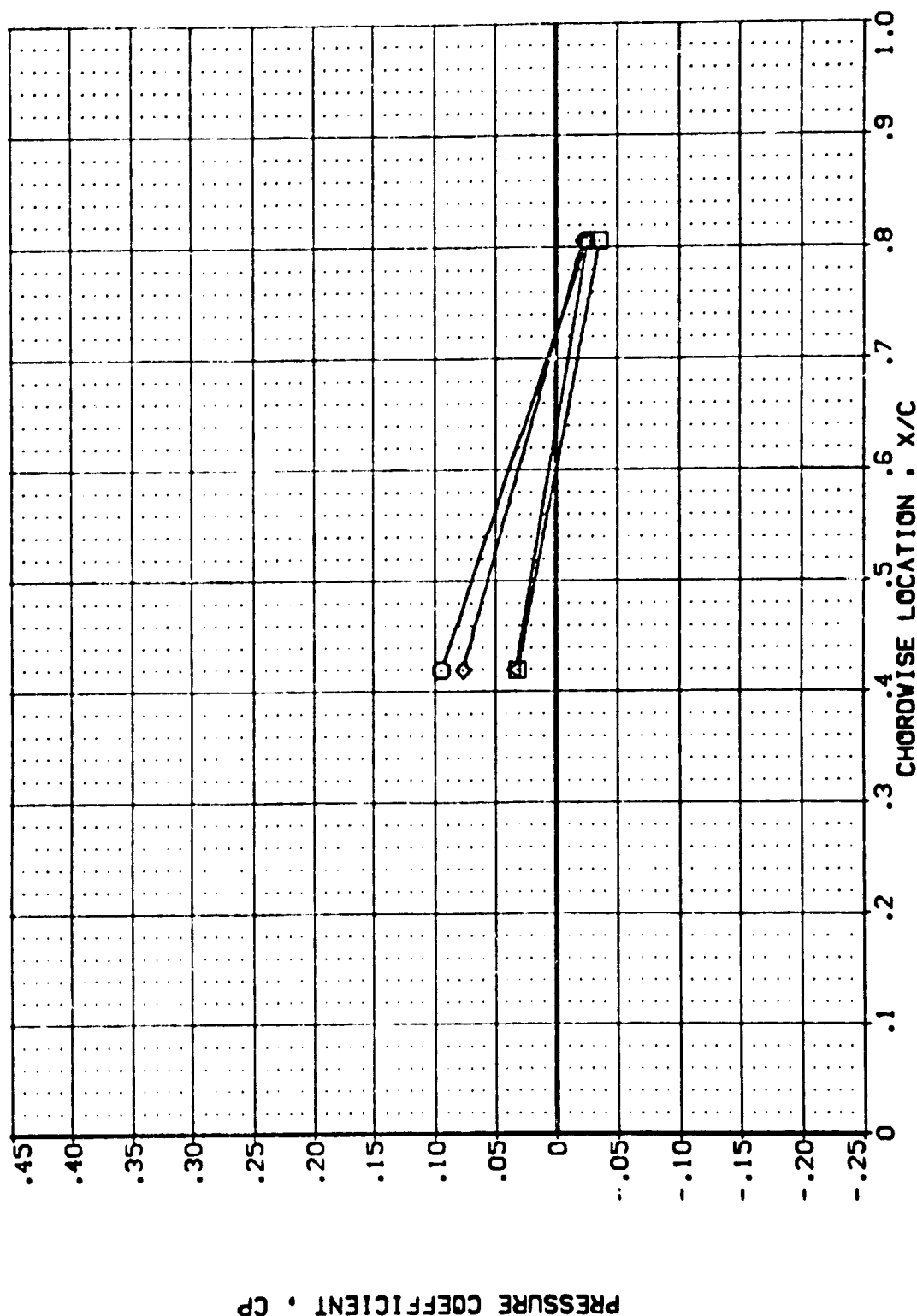


PLUME AND SR8 POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZ008) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ041) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ114) AYES 87-710 1A12C 01 T1 S2 LOWER WING PRESSURE
 (LBZ117) AYES 87-710 1A12C 01 T1 S2 LOWER WING PRESSURE

POWER CRR SRPR GIMBAL
 .000 26.860 .768 1.000
 1.000 26.860 .768 1.000
 1.000 26.860 .768 1.000

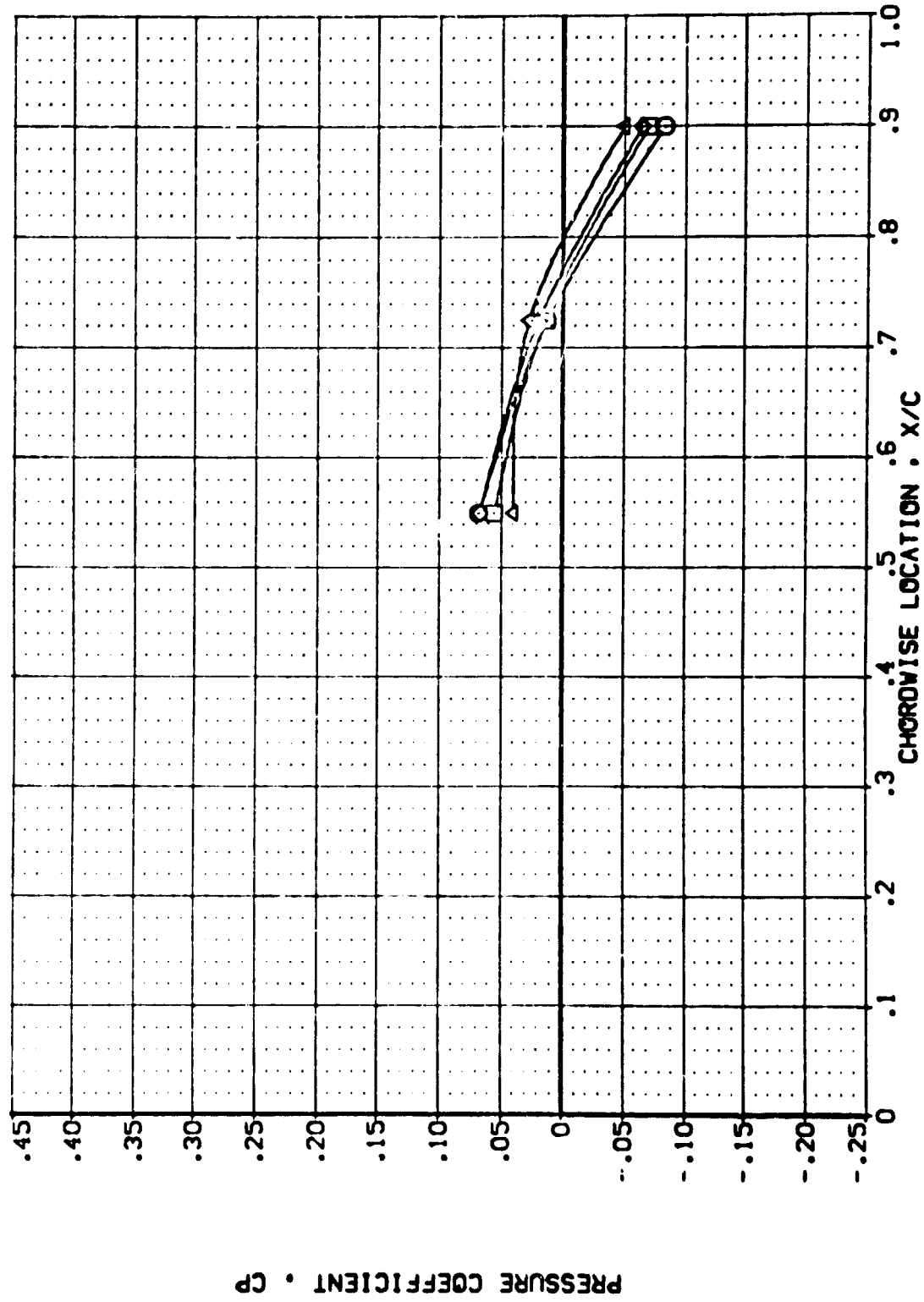


PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .427

PAGE 614

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	DPR	SWPR	GIMBAL
(LBZ038)	AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LBZ041)	AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	1.000	26.860	.768	1.000
(LBZ114)	AVES 87-710 1A12C 01 T1 S2 LOWER WING PRESSURE	1.000			1.000
(LBZ117)	AVES 87-710 1A12C 01 T1 S2 LOWER WING PRESSURE	1.000	26.860	.768	1.000

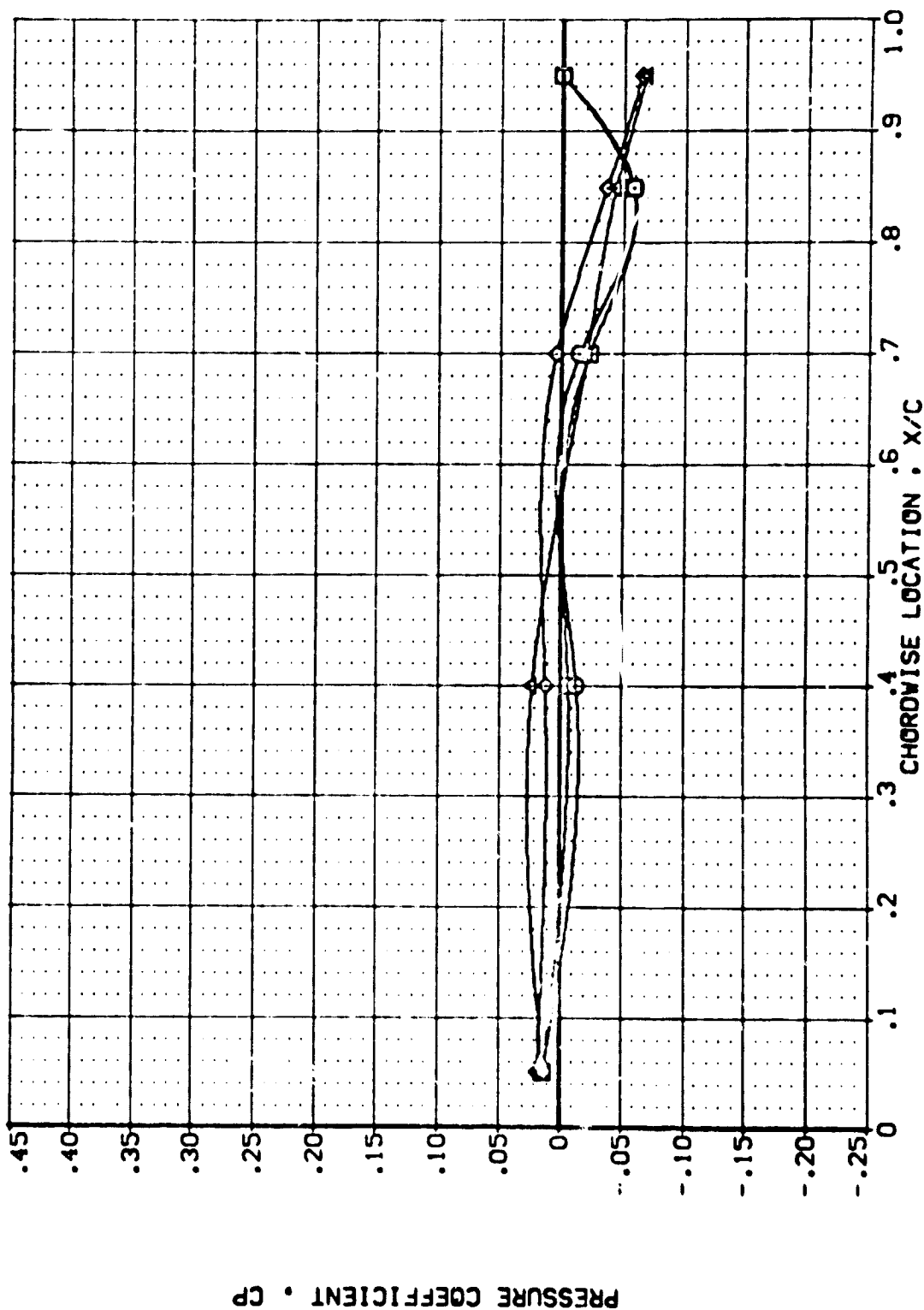


PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CFF SFFR GIMBAL

(LBZ038)	AMES 87-710 IAI2C 01 T1 S1	.000			1.000
(LBZ041)	AMES 87-710 IAI2C 01 T1 S1	1.000	26.860	.768	1.000
(LBZ114)	AMES 87-710 IAI2C 01 T1 S2	.000			1.000
(LBZ117)	AMES 87-710 IAI2C 01 T1 S2	1.000	26.860	.768	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL

(LBZ038)
(LBZ041)
(LBZ114)
(LBZ117)

CONFIGURATION DESCRIPTION

AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE

POWER

.000
1.000
.000
1.000

OPR

26.860
26.860

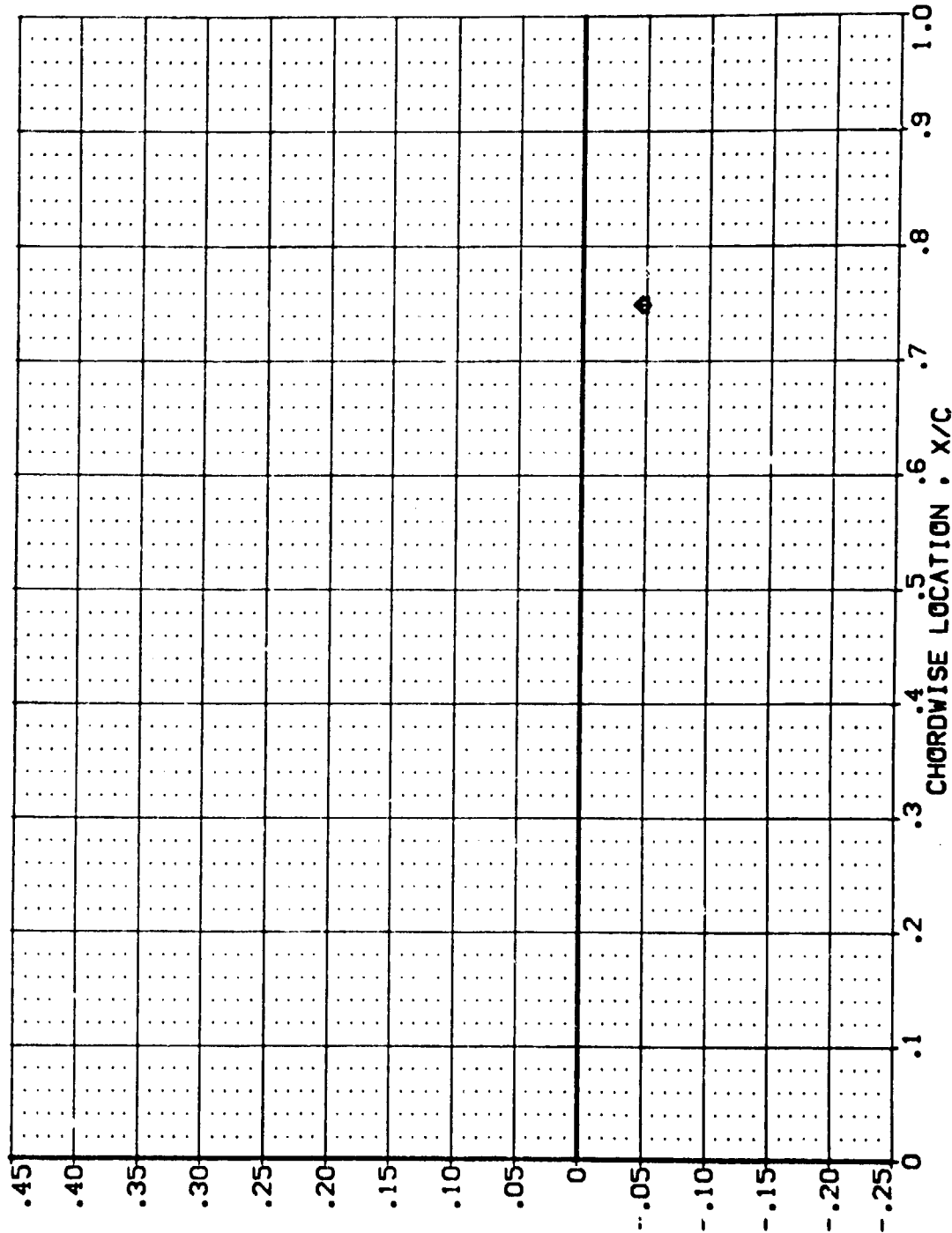
SPRPR

.768
.768

GINBLV

1.000
1.000
1.000
1.000

PRESSURE COEFFICIENT . CP



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .780

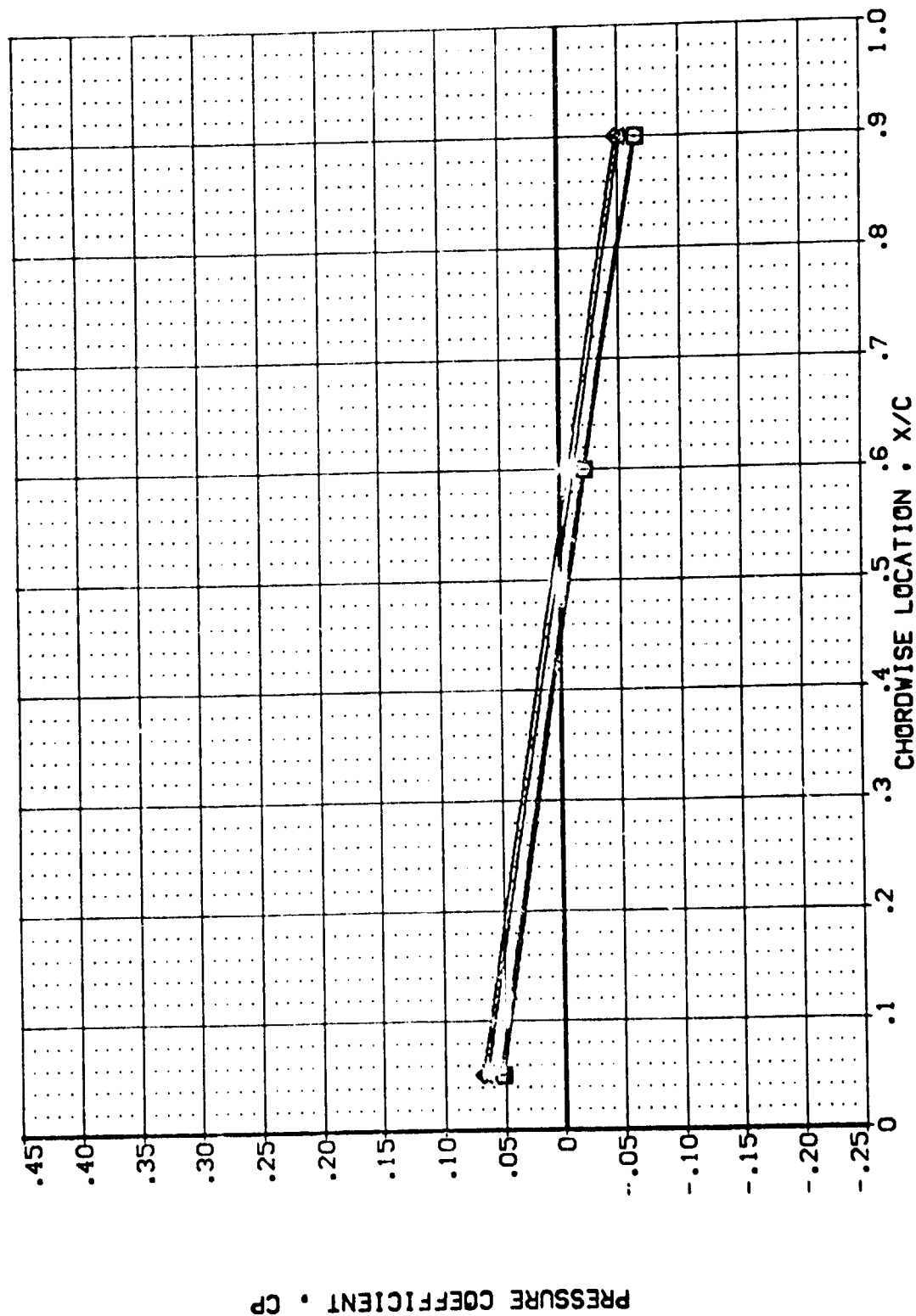
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CDR SRPR GIMBAL

(LB2038) APES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE .000 26.860 .768 1.000

(LB2041) APES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE 1.000 26.860 .768 1.000

(LB2114) APES 87-710 IALZC 01 T1 S2 LOWER WING PRESSURE .000 26.860 .768 1.000

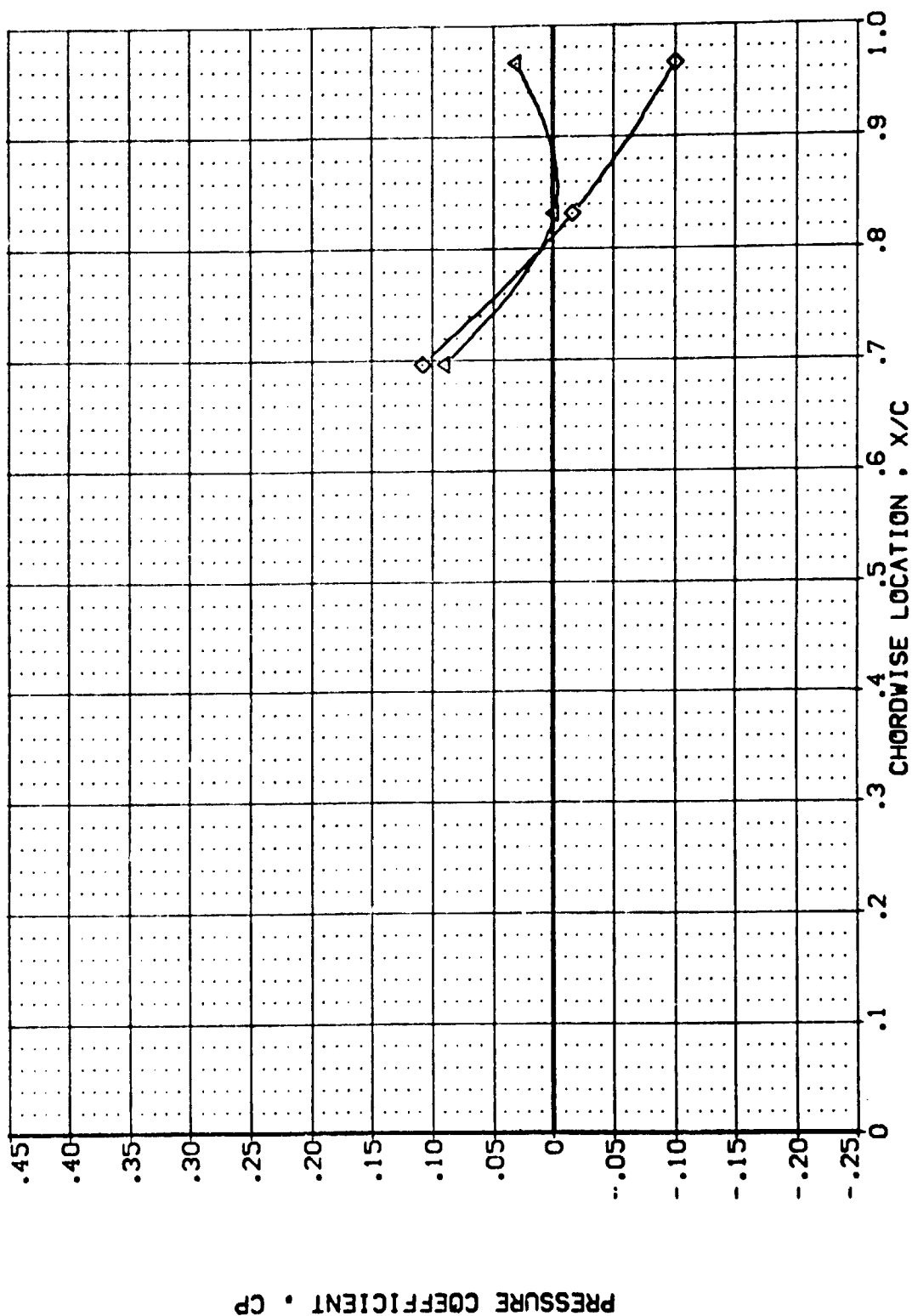
(LB2117) APES 87-710 IALZC 01 T1 S2 LOWER WING PRESSURE 1.000 26.860 .768 1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .887 PAGE 618

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SRPR	GIMBAL
(LB2028)	AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	.000	26.860	.768	1.000
(LB2041)	AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE	1.000	26.860	.768	1.000
(LB2114)	AVES 87-710 1A12C 01 T1 S2 LOWER WING PRESSURE	.000	26.860	.768	1.000
(LB2117)	AVES 87-710 1A12C 01 T1 S2 LOWER WING PRESSURE	1.000	26.860	.768	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .299

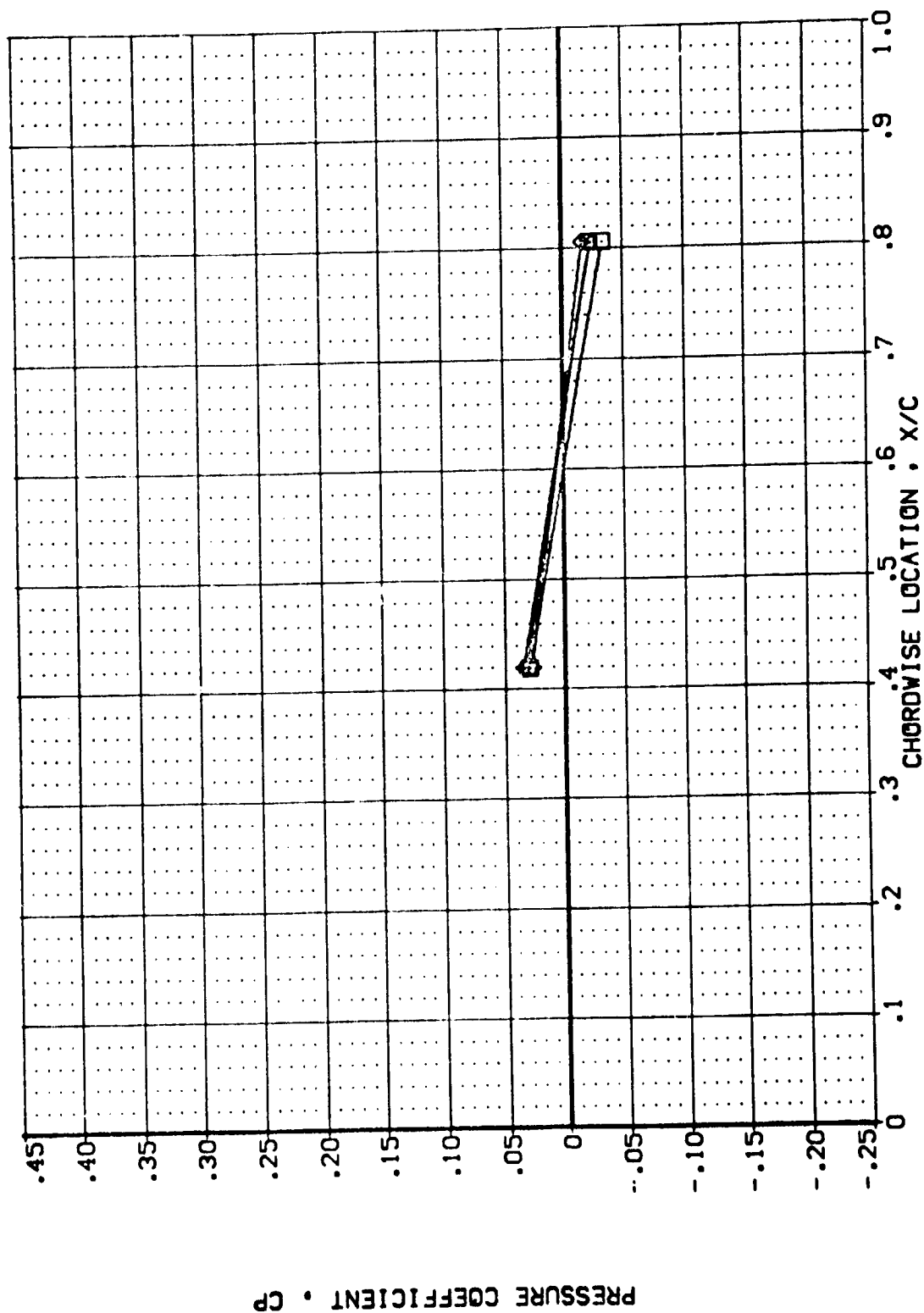
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/W/R GIMBAL

(LBZ008) AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 26.860 .768 1.000

(LBZ041) AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 26.860 .768 1.000

(LBZ114) AVES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE .000 26.860 .768 1.000

(LBZ117) AVES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE 1.000 26.860 .768 1.000



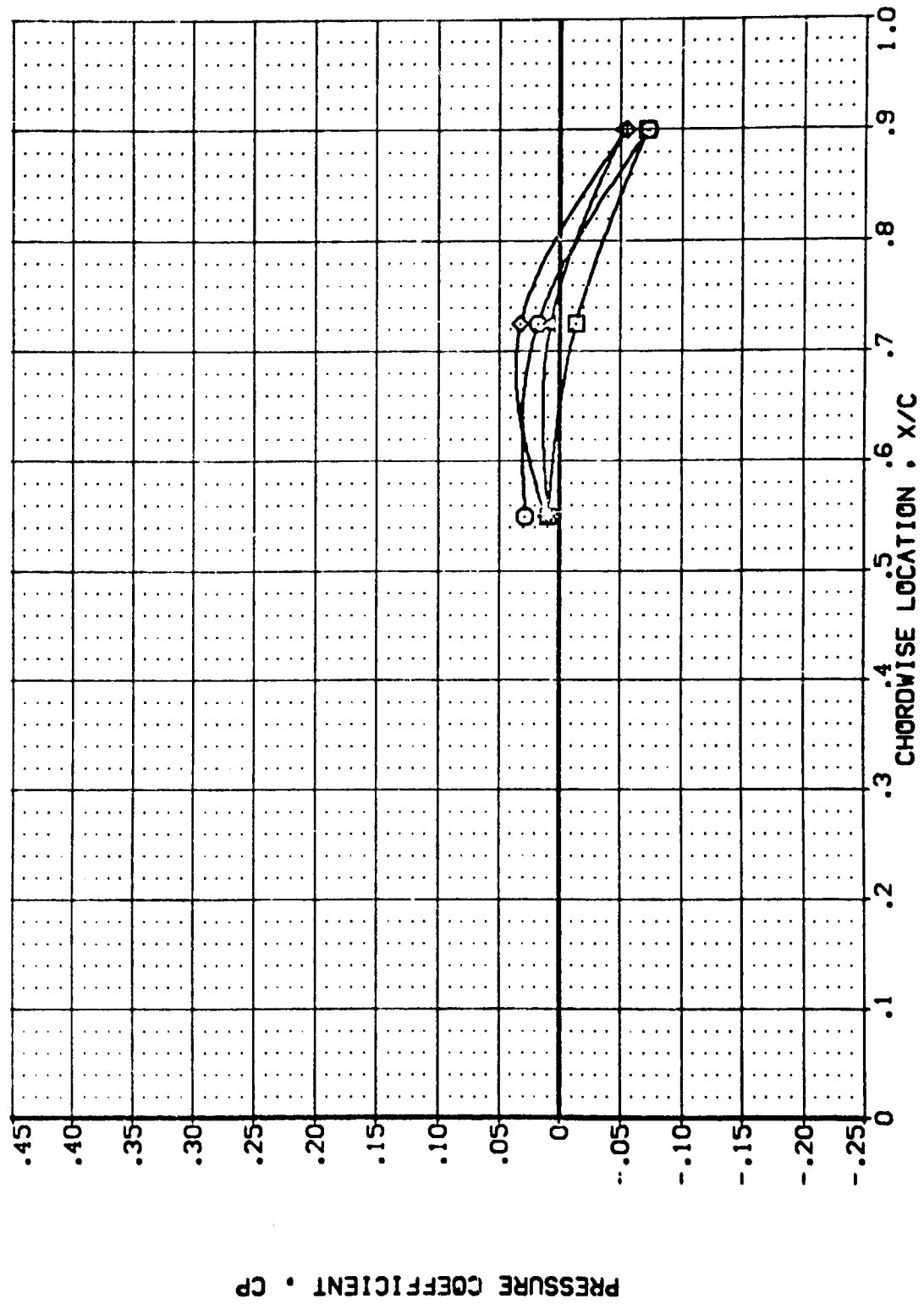
PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .427

PAGE 620

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZ008) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
 (LBZ041) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
 (LBZ114) AMES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE
 (LBZ117) AMES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE

POWER C/P SR/PR GIMBAL
 .000 26.860 1.000
 1.000 .768 1.000
 1.000 26.860 .768 1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

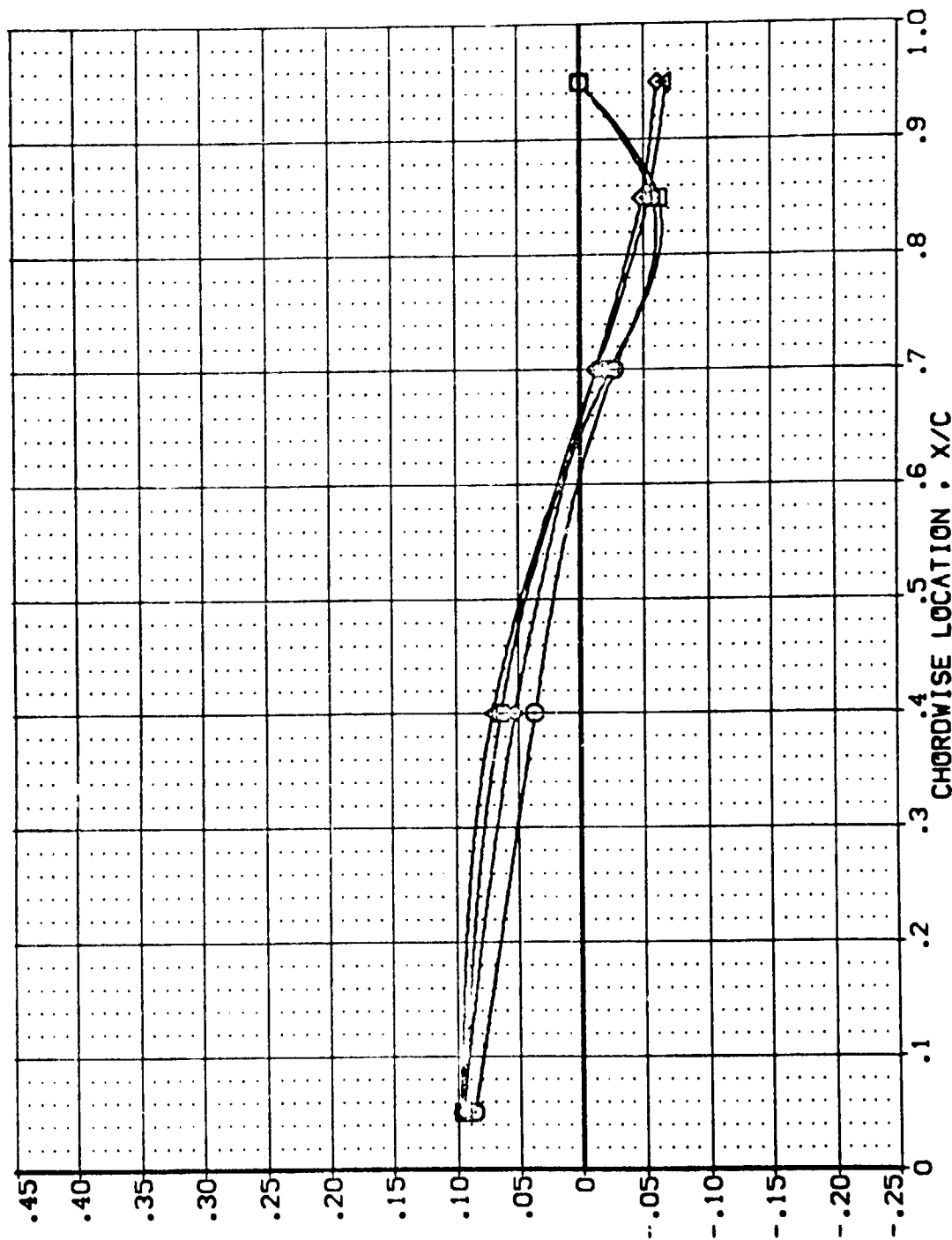
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER OFR SRPR GIMBAL

(LBZ008) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 26.860 .768 1.000

(LBZ041) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 26.860 .768 1.000

(LBZ114) AYES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE .000 26.860 .768 1.000

(LBZ117) AYES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE 1.000 26.860 .768 1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .673

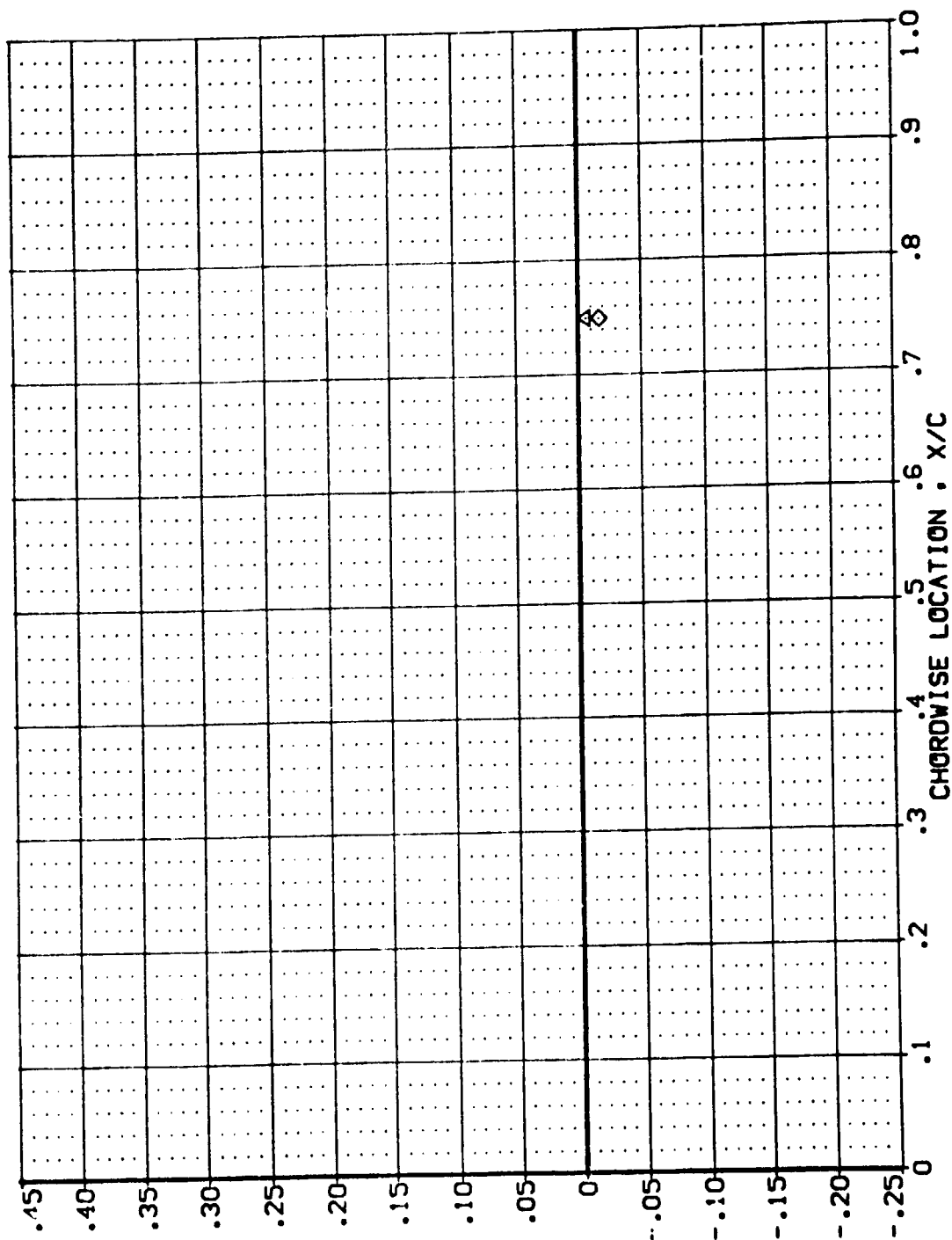
PAGE 622

(L8Z038)
(L8Z041)
(L8Z114)
(L8Z117)

POWER	OPR	STPR	GMBAL
1.000			1.000
1.000	26.860	.768	1.000
1.000			1.000
1.000	26.860	.768	1.000

AMES	87-710	1A12C	01	T1	S1	LOWER	VING	PRESSURE
AMES	87-710	1A12C	01	T1	S1	LOWER	VING	PRESSURE
AMES	87-710	1A12C	01	T1	S2	LOWER	VING	PRESSURE
AMES	87-710	1A12C	01	T1	S2	LOWER	VING	PRESSURE

PRESSURE COEFFICIENT, CP



PHASE AND SPR POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .780

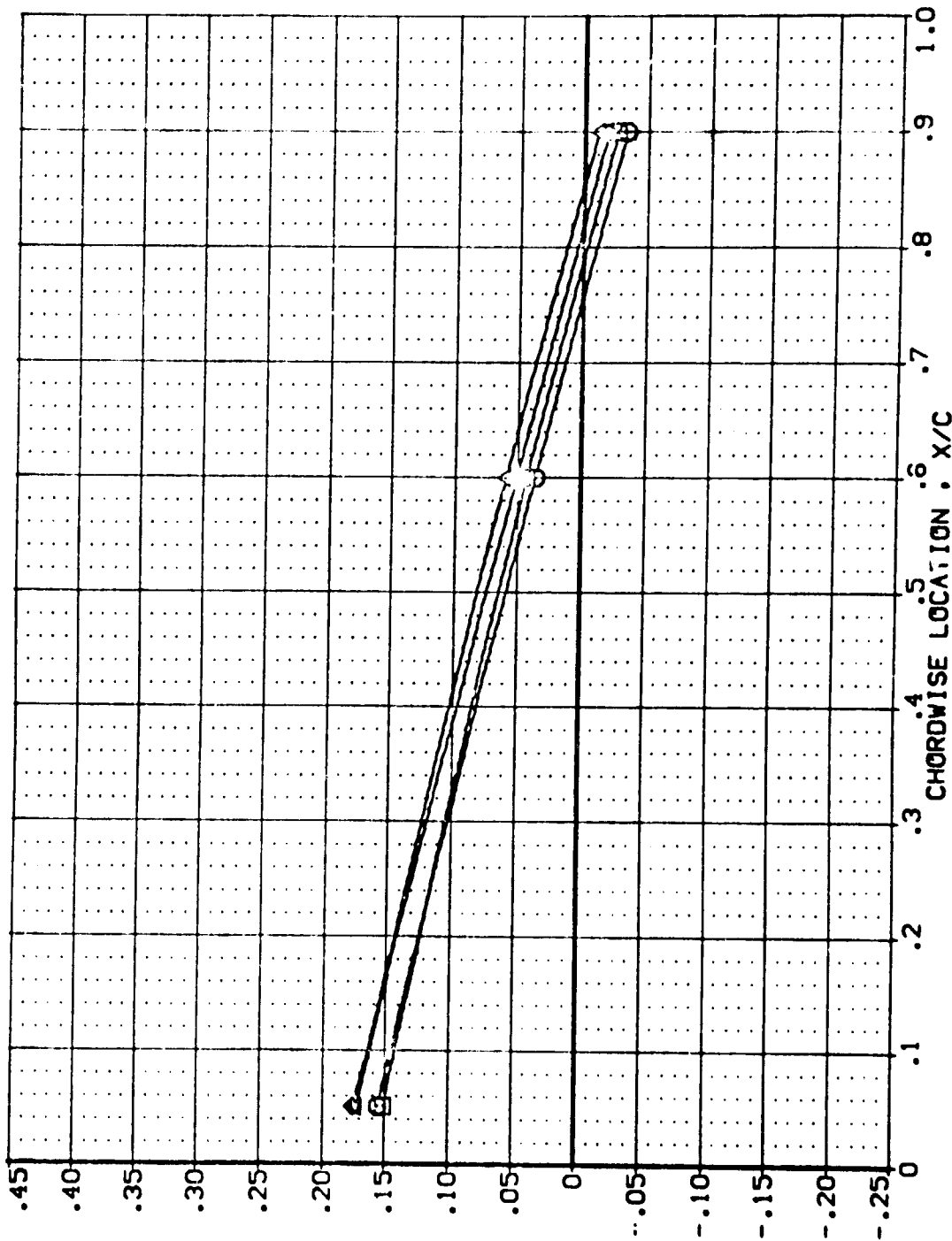
PAGE 623

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ038)
(LBZ041)
(LBZ114)
(LBZ117)

AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE

POWER .000
DPR 26.860
SRPR .768
GIMBAL 1.000



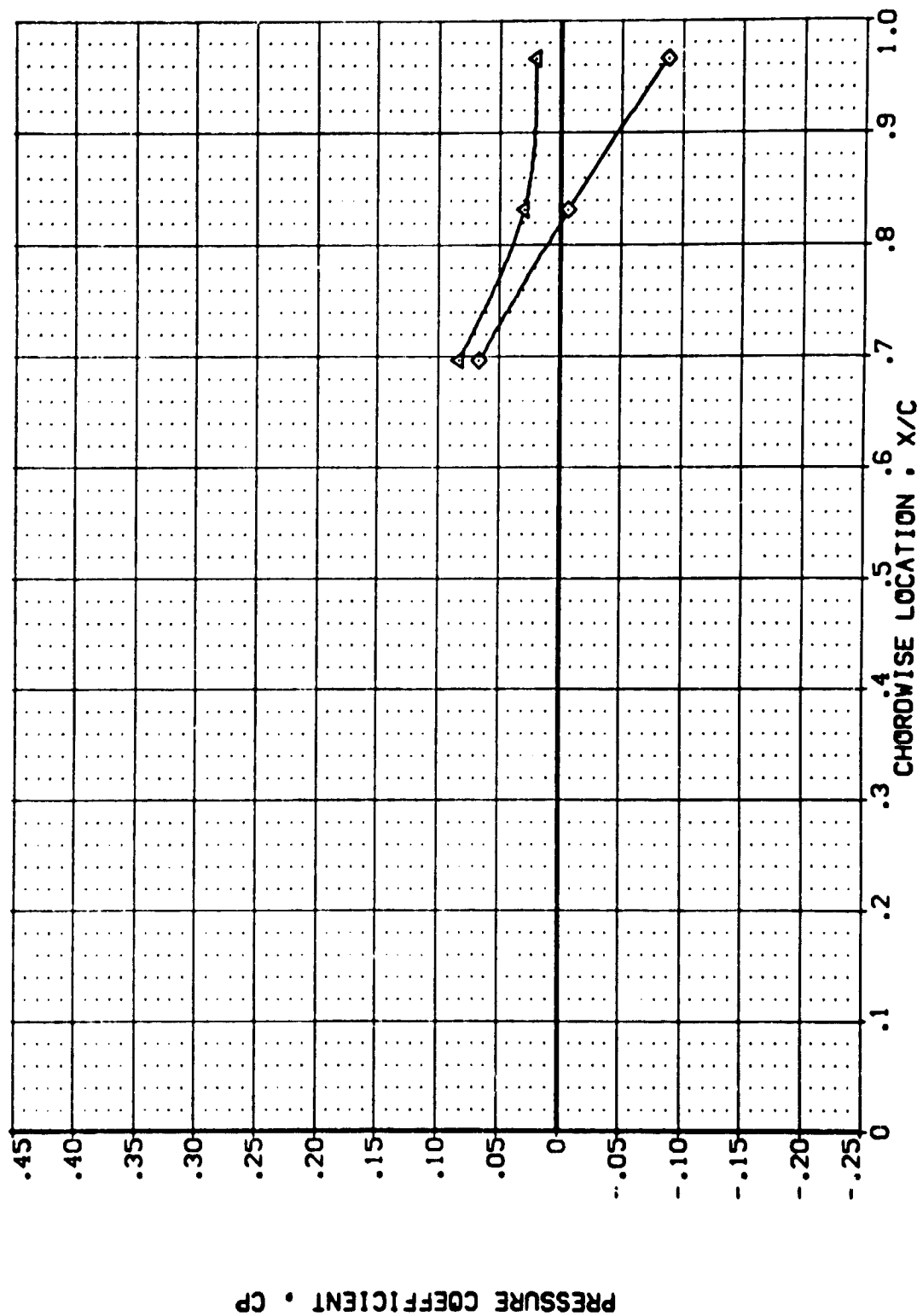
PRESSURE COEFFICIENT, CP

PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ008)  APES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 26.660 1.000
 (LBZ041)  APES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 26.660 1.000
 (LBZ114)  APES 87-710 1A12C 01 T1 S2 LOWER WING PRESSURE 1.000 26.660 1.000
 (LBZ117)  APES 87-710 1A12C 01 T1 S2 LOWER WING PRESSURE 1.000 26.660 1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .299

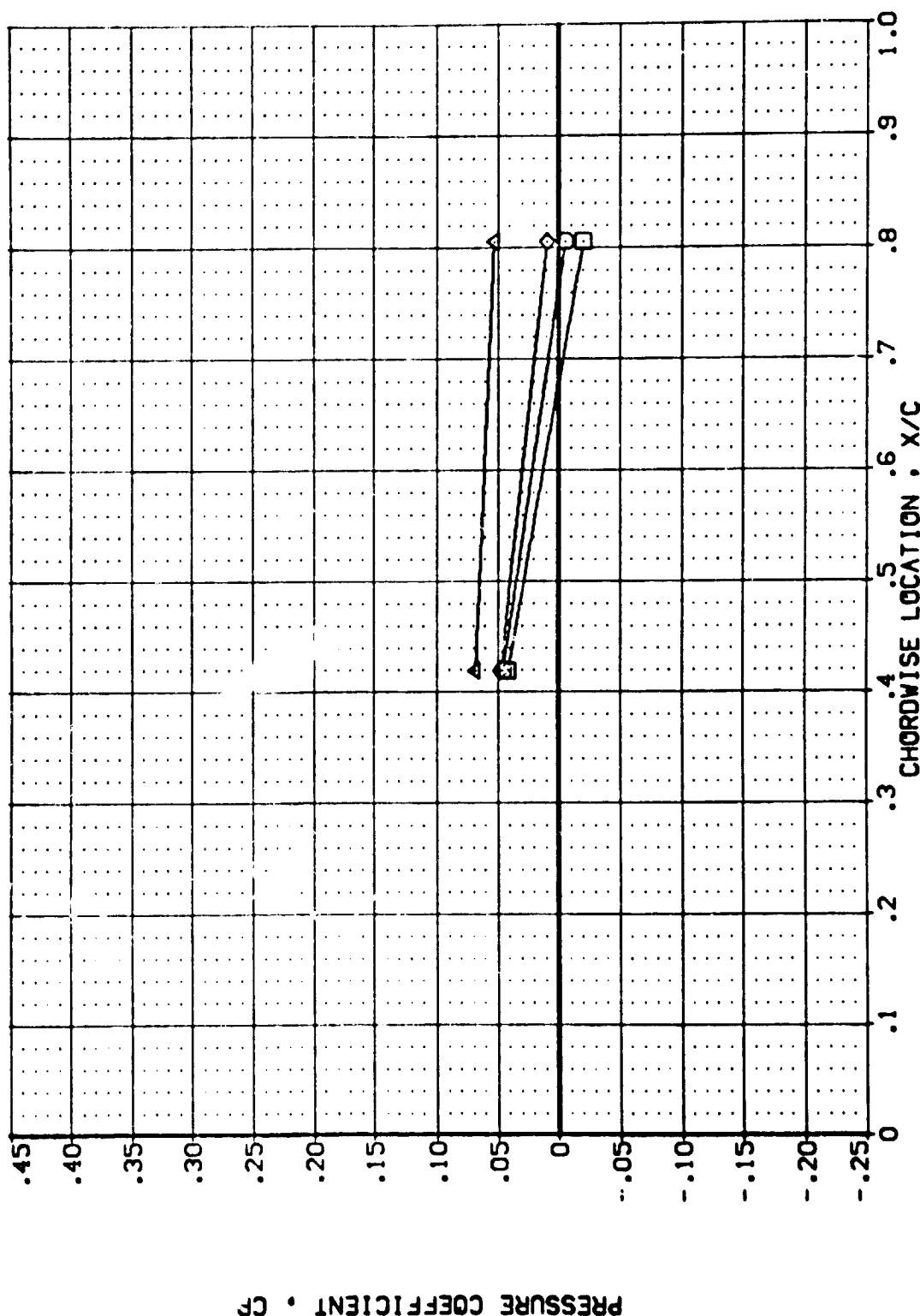
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER OPR SRPR GIMBAL

(LBZ039) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 26.860 .768 1.000

(LBZ041) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 26.860 .768 1.000

(LBZ114) ASES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE 1.000 26.860 .768 1.000

(LBZ117) ASES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE 1.000 26.860 .768 1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .427

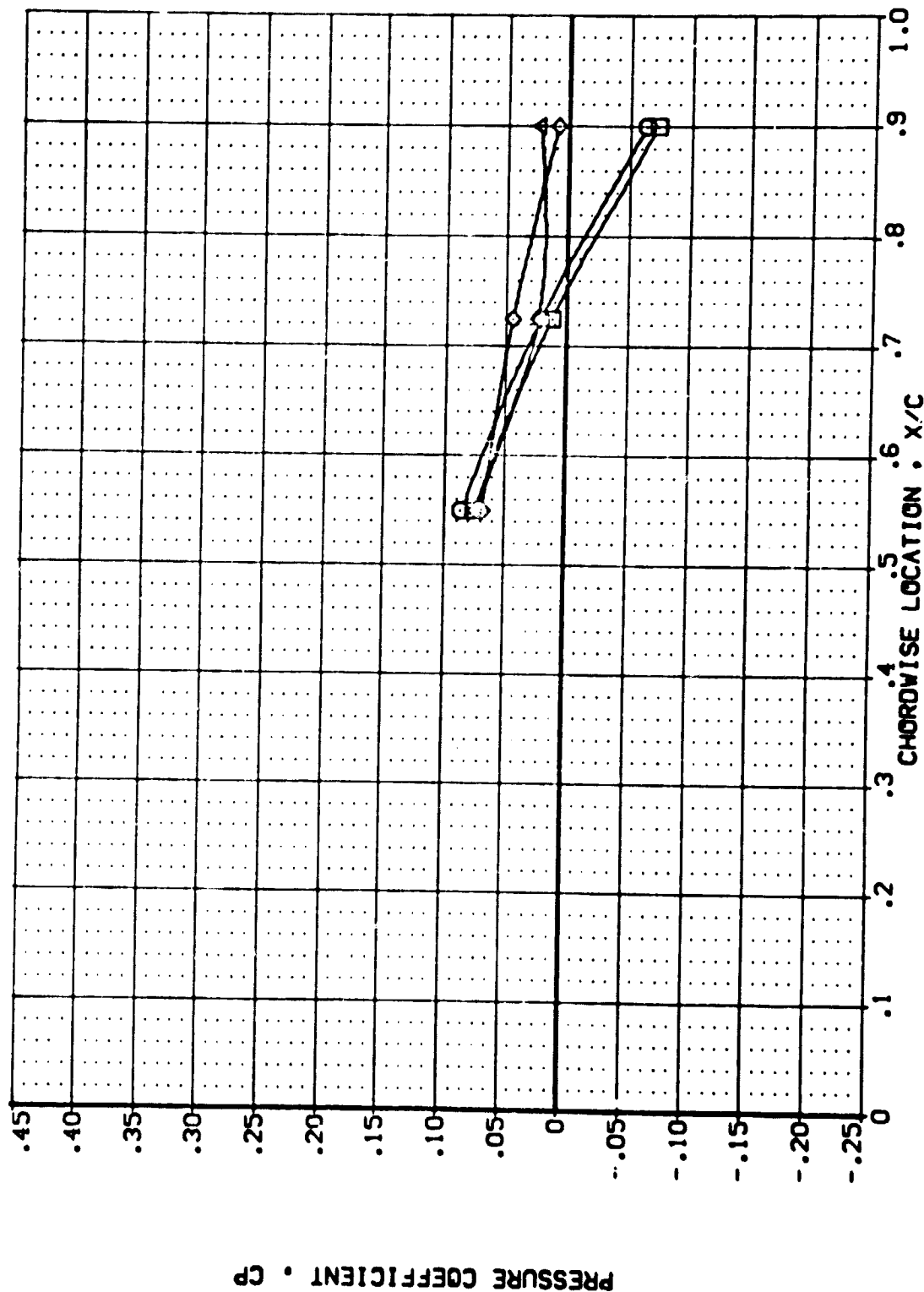
PAGE 626

DATA SET SYMBOL

(LB7038)
(LB7041)
(LB7114)
(LB7117)

CONFIGURATION DESCRIPTION
AVES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAL2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAL2C 01 T1 S2 LOWER WING PRESSURE
AVES 87-710 IAL2C 01 T1 S2 LOWER WING PRESSURE

POWER C/P SRP SRP GINBAL
.000 26.860 .768 1.000
1.000 26.860 .768 1.000
1.000 26.860 .768 1.000

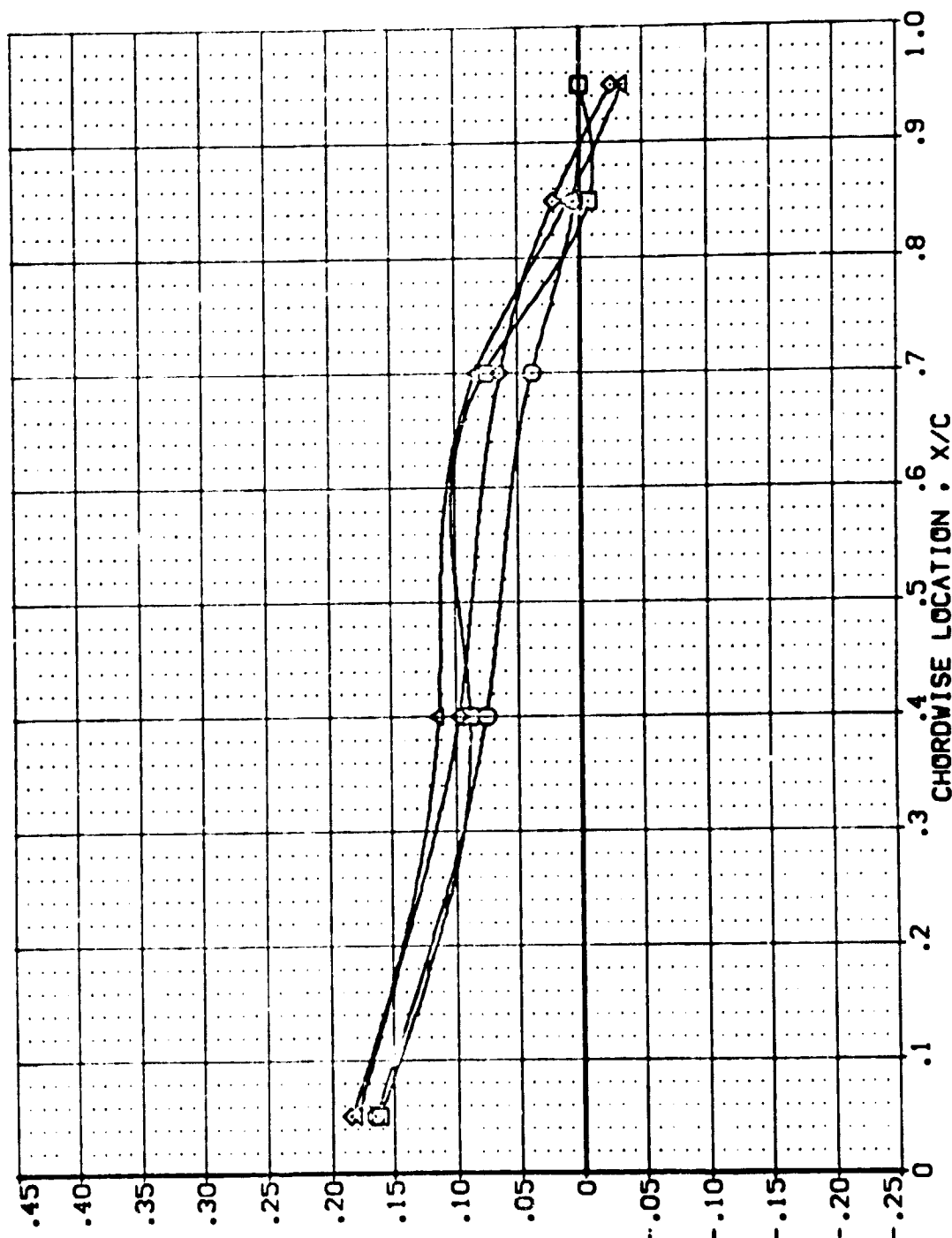


PRESSURE COEFFICIENT • CP

PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CFR	SPRFR	GIMBAL
(LBZ008)	AVES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LBZ041)	AVES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE	1.000	26.660	.768	1.000
(LBZ114)	AVES 87-710 IALZC 01 T1 S2 LOWER WING PRESSURE	.000			1.000
(LBZ117)	AVES 87-710 IALZC 01 T1 S2 LOWER WING PRESSURE	1.000	26.660	.768	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .673

DATA SET SYMBOL: (LB2008) (LB2041) (LB2114) (LB2117)

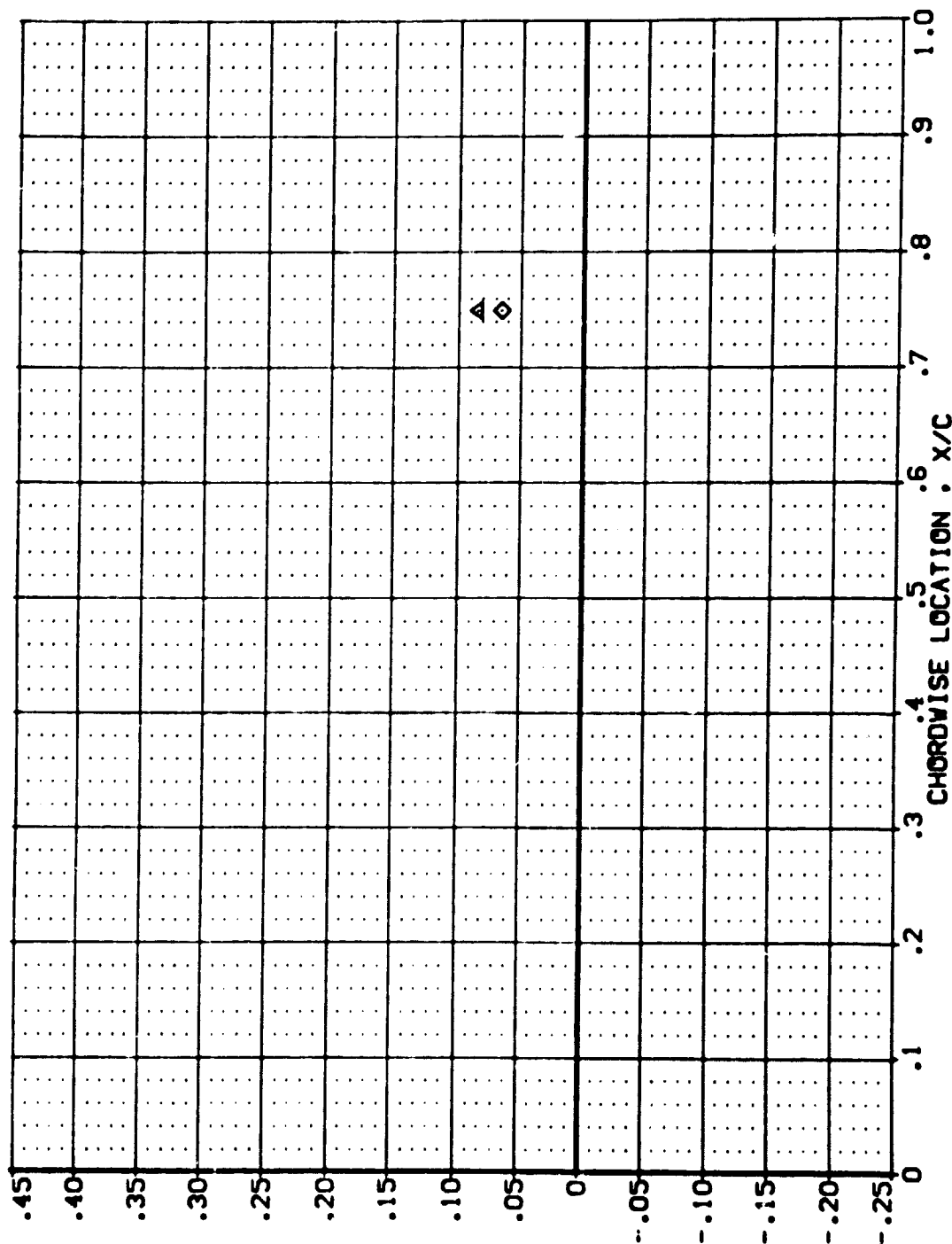
CONFIGURATION DESCRIPTION: AVE8 87-710 AVE8 87-710 AVE8 87-710 AVE8 87-710

POWER: .000 1.000 .000 1.000

OPR: 26.660 26.660

SRPR: .768 .768





GIMBAL: 1.000 1.000 1.000



PLUME AND SR8 POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

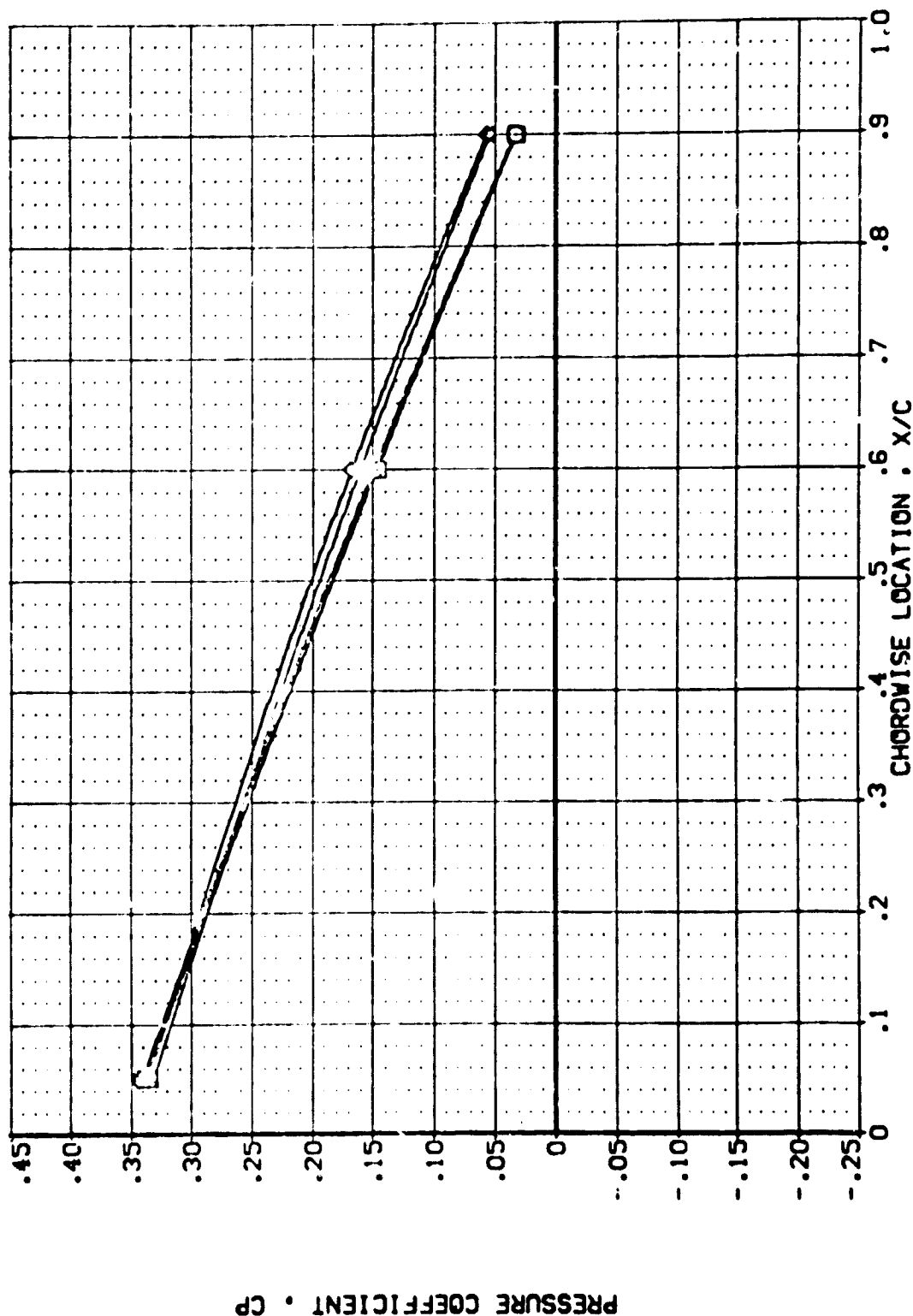
(LBZ008) 
 (LBZ041) 
 (LBZ114) 
 (LBZ117) 

AVES 87-710
 AVES 87-710
 AVES 87-710
 AVES 87-710

IA12C 01 T1 S1
 IA12C 01 T1 S1
 IA12C 01 T1 S1
 IA12C 01 T1 S1

LOWER WING PRESSURE
 LOWER WING PRESSURE
 LOWER WING PRESSURE
 LOWER WING PRESSURE

POWER DPR SDRP GIMBAL
 .000 26.860 .768 1.000
 1.000 26.860 .768 1.000
 1.000 26.860 .768 1.000
 1.000 26.860 .768 1.000



PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .887

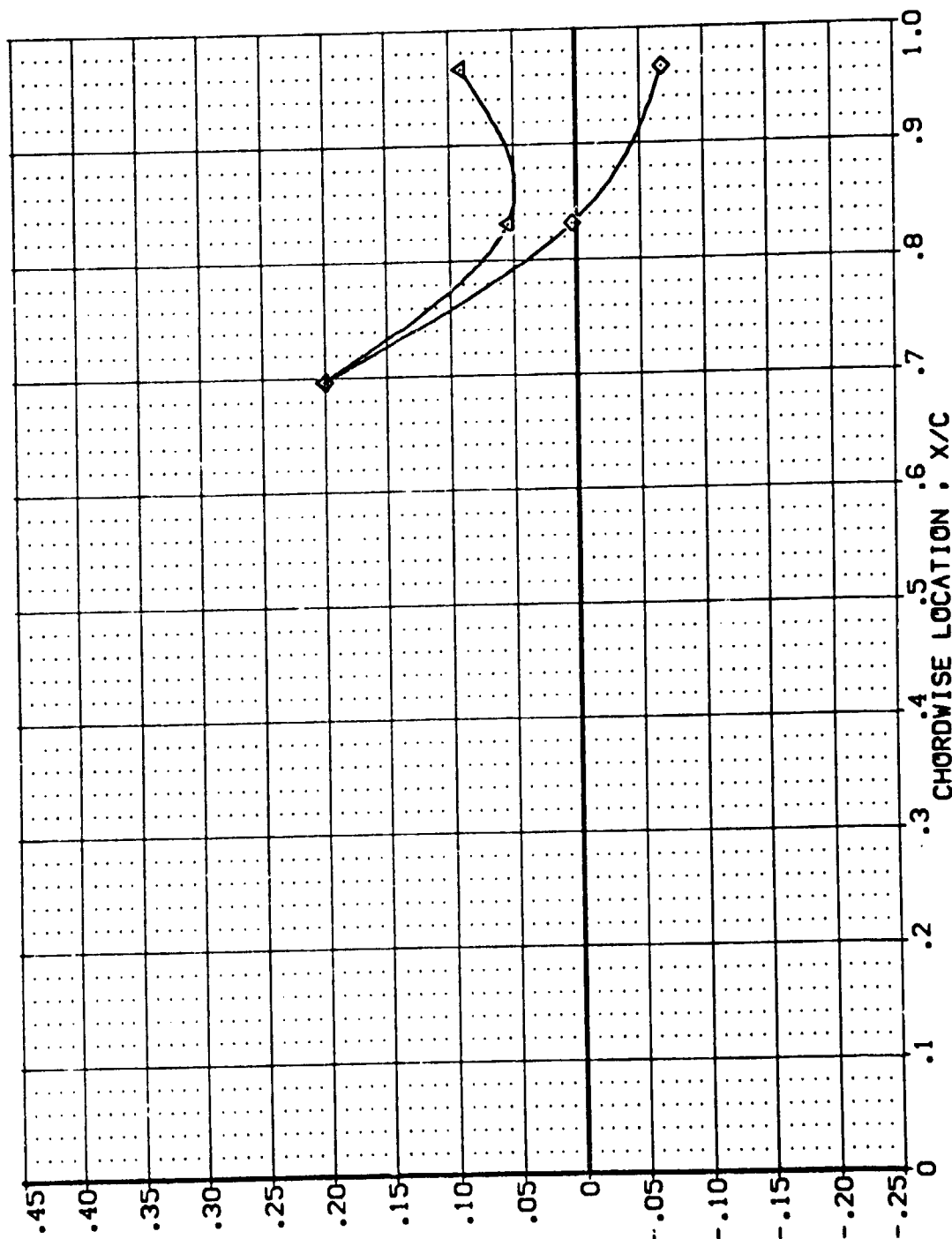
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/P/R GIMBAL

(LBZ046) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 23.860 1.000

(LBZ050) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 23.860 1.000

(LBZ118) AMES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE .000 23.860 1.000

(LBZ121) AMES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE .000 23.860 1.000



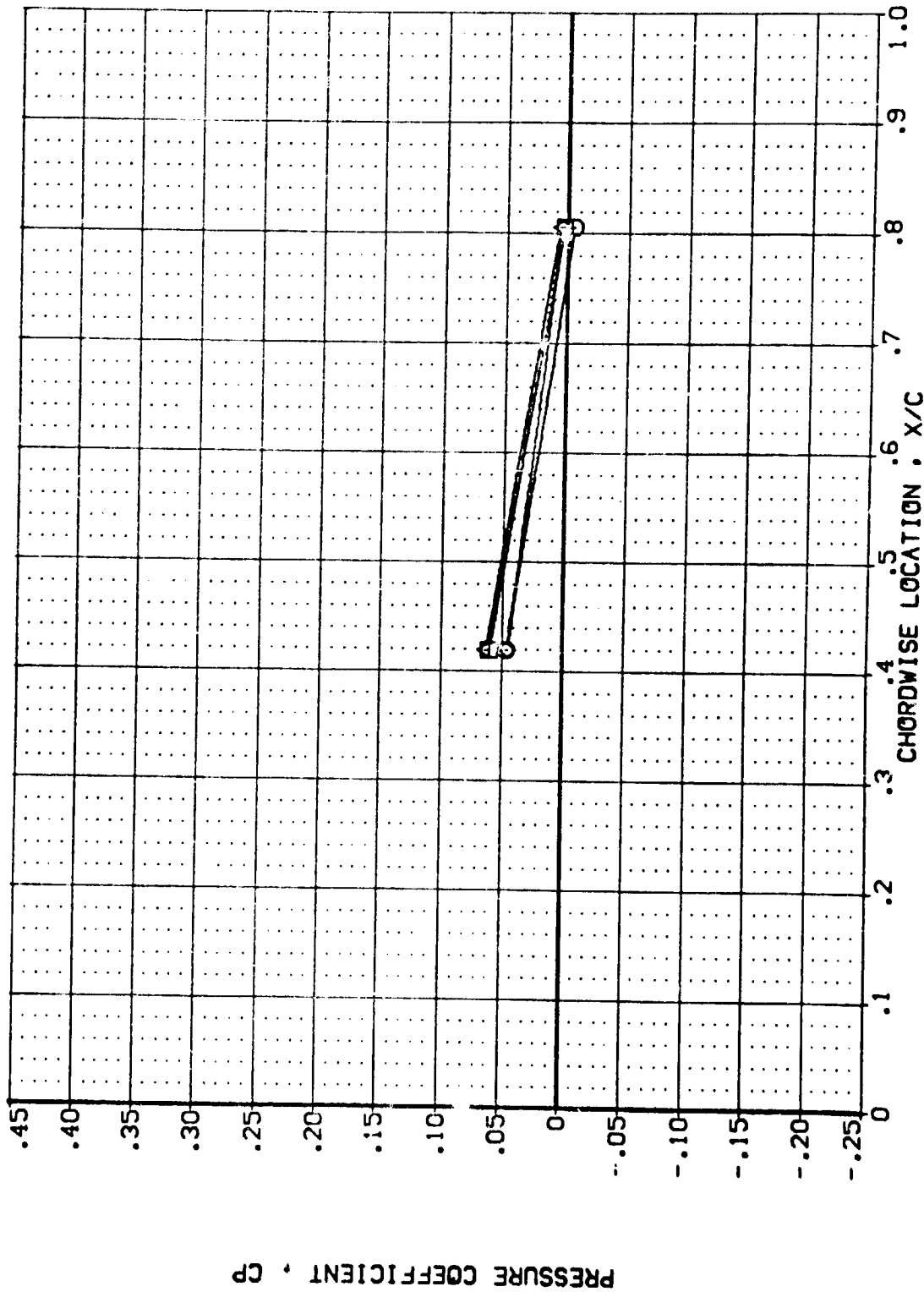
PRESSURE COEFFICIENT • CP

PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .299

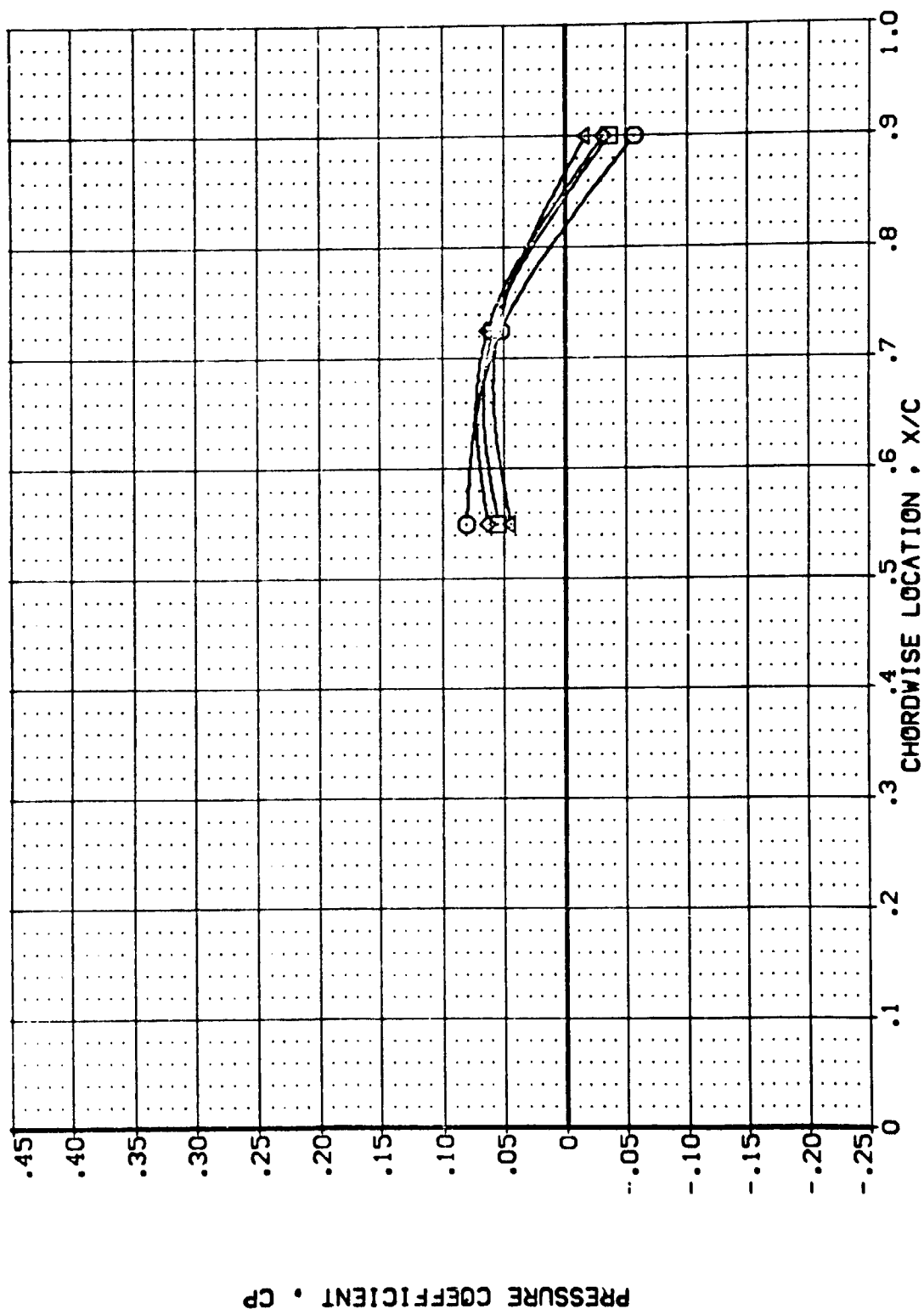
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZC:8) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE POWER CPR SRPR GINBAL
 (LBZD:50) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 23.860 1.000
 (LBZ118) AYES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE 1.000 23.860 1.000
 (LBZ121) AYES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE 1.000 23.860 1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM
 MACH = 3.500 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	DPR	SMFR	GINBAL
(LB2046)	AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	.000	23.860	.806	1.000
(LB2050)	AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	1.000	23.860	.806	1.000
(LB2118)	AVES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE	.000	23.860	.806	1.000
(LB2121)	AVES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE	1.000	23.860	.806	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

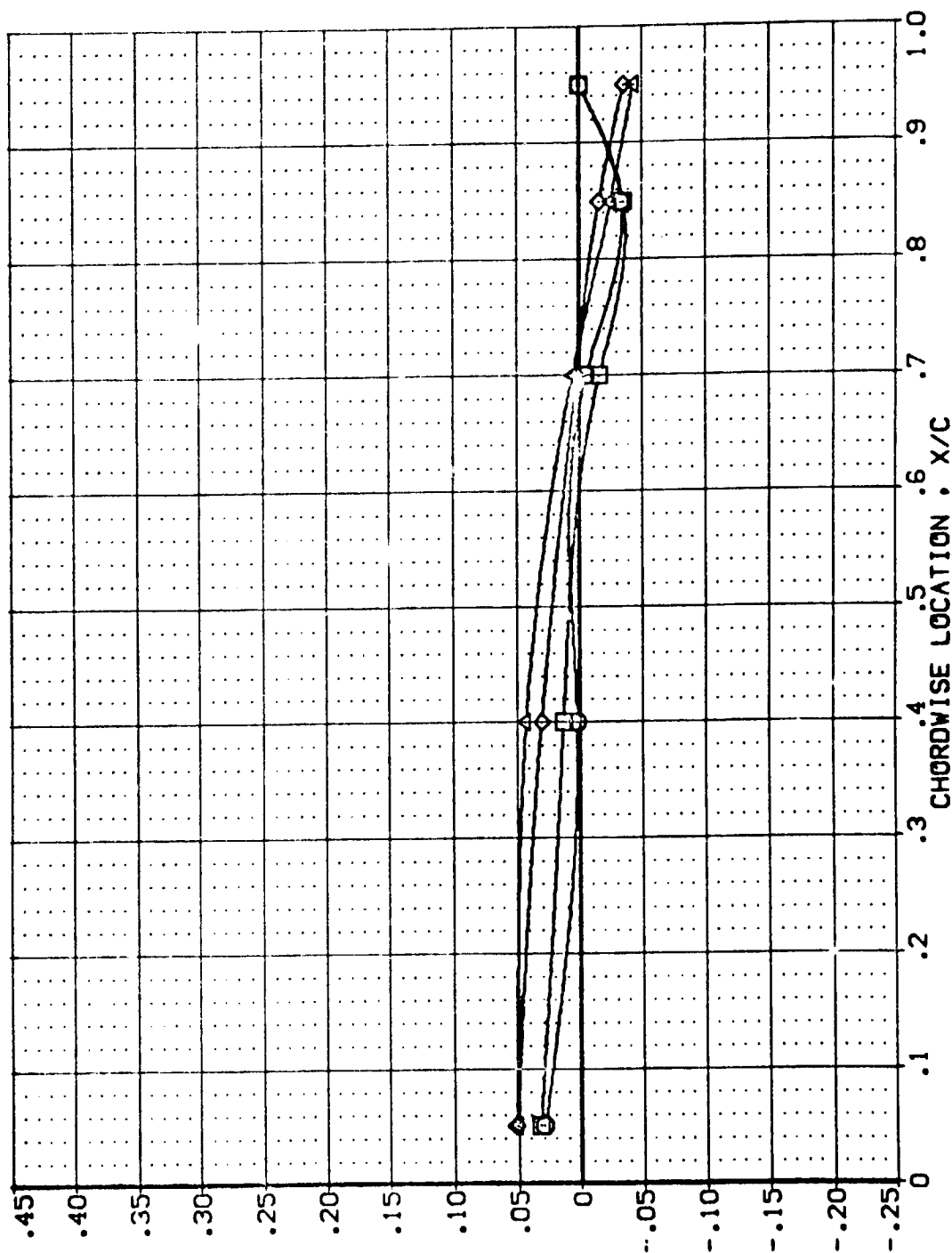
MACH = 3.500 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ046)
(LBZ050)
(LBZ118)
(LBZ121)

AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE

POWER CPR SR-PR GIMBAL
.000 23.860 .826 1.000
1.000 23.860 .826 1.000
1.000 23.860 .826 1.000



PRESSURE COEFFICIENT, CP

PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL
(LB7046)
(LB1050)
(LB1118)
(LB2121)

CONFIGURATION DESCRIPTION

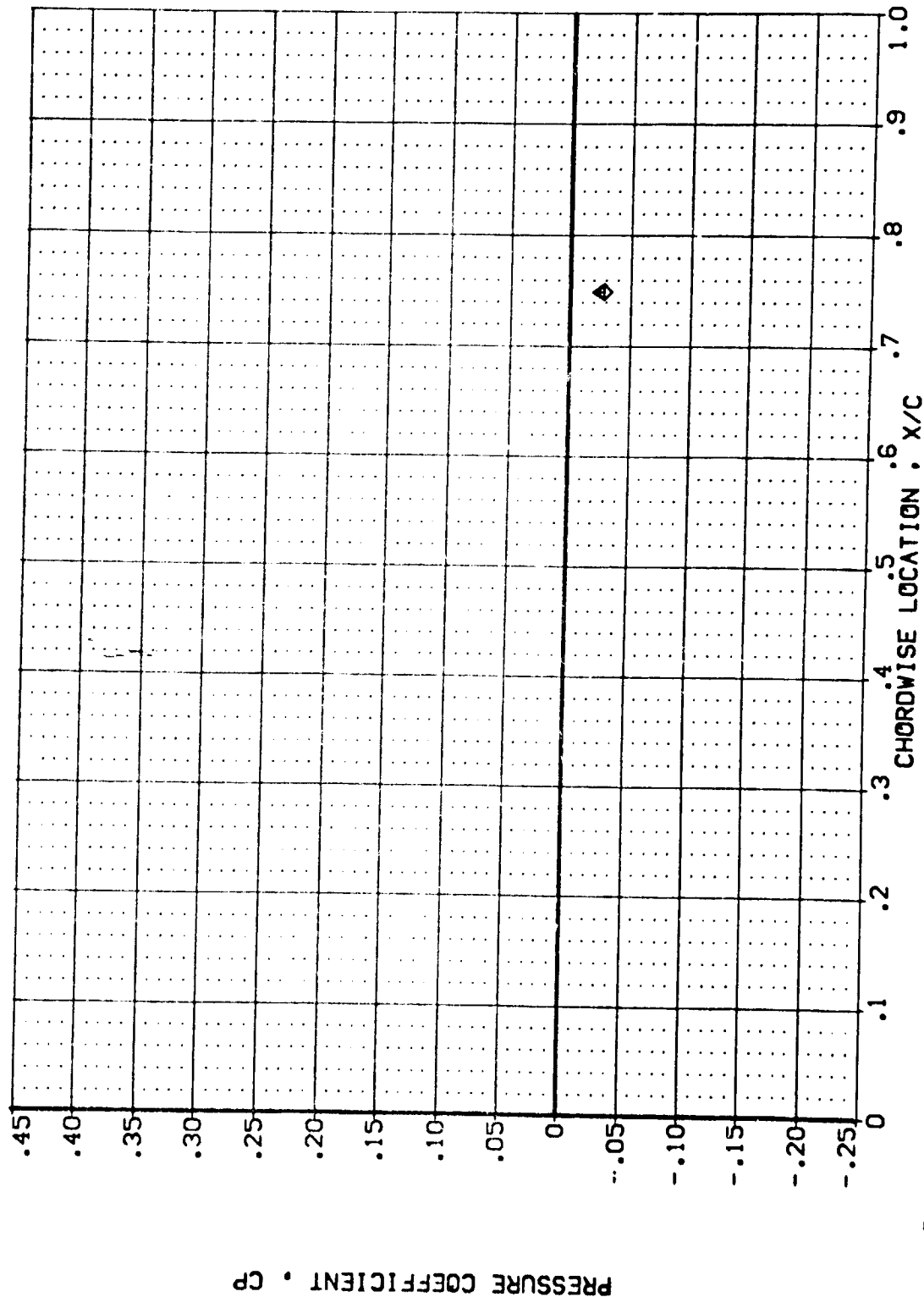
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE

POWER
.000
1.000
1.000
1.000

OPR
23.860
23.860

SPRPR
.826
.826

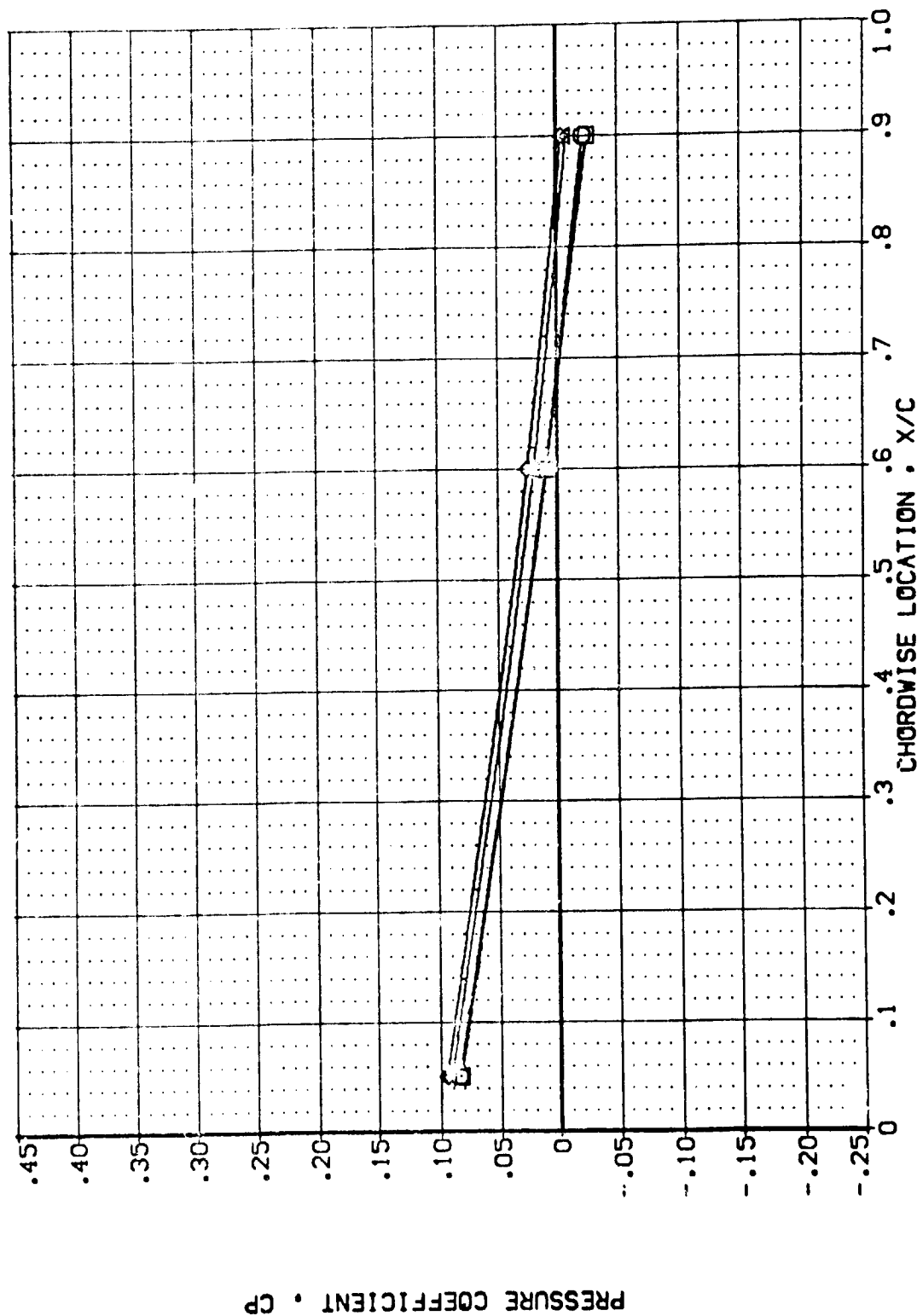
GIMBAL
1.000
1.000
1.000
1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .780

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SRPR	GIMBAL
(LBZ046)	AMES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	.000			1.000
(LBZ050)	AMES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LBZ118)	AMES 87-710 [A12C 01 T1 S2] LOWER WING PRESSURE	.000			1.000
(LBZ121)	AMES 87-710 [A12C 01 T1 S2] LOWER WING PRESSURE	1.000	23.860	.826	1.000

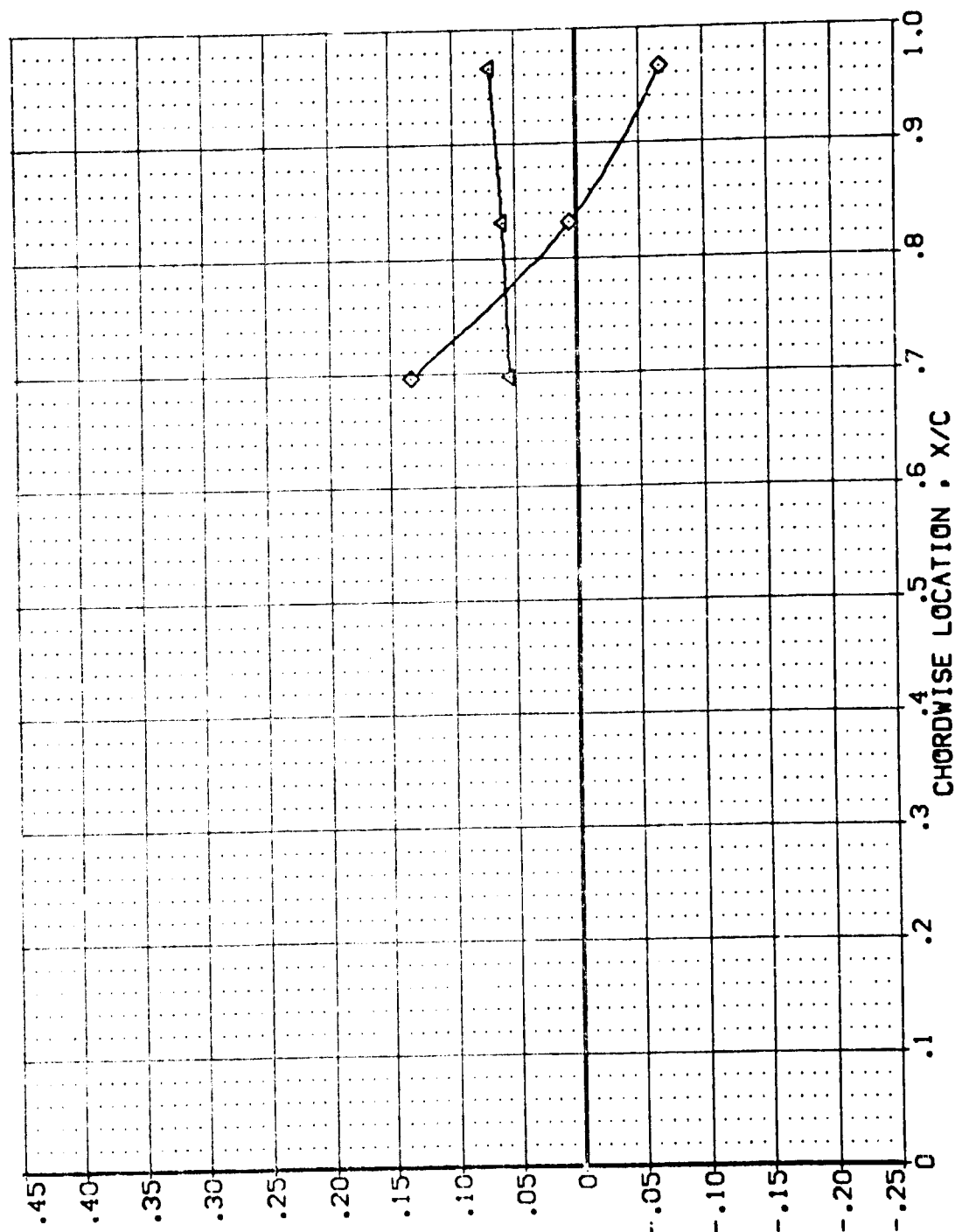


PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .887

PAGE 636

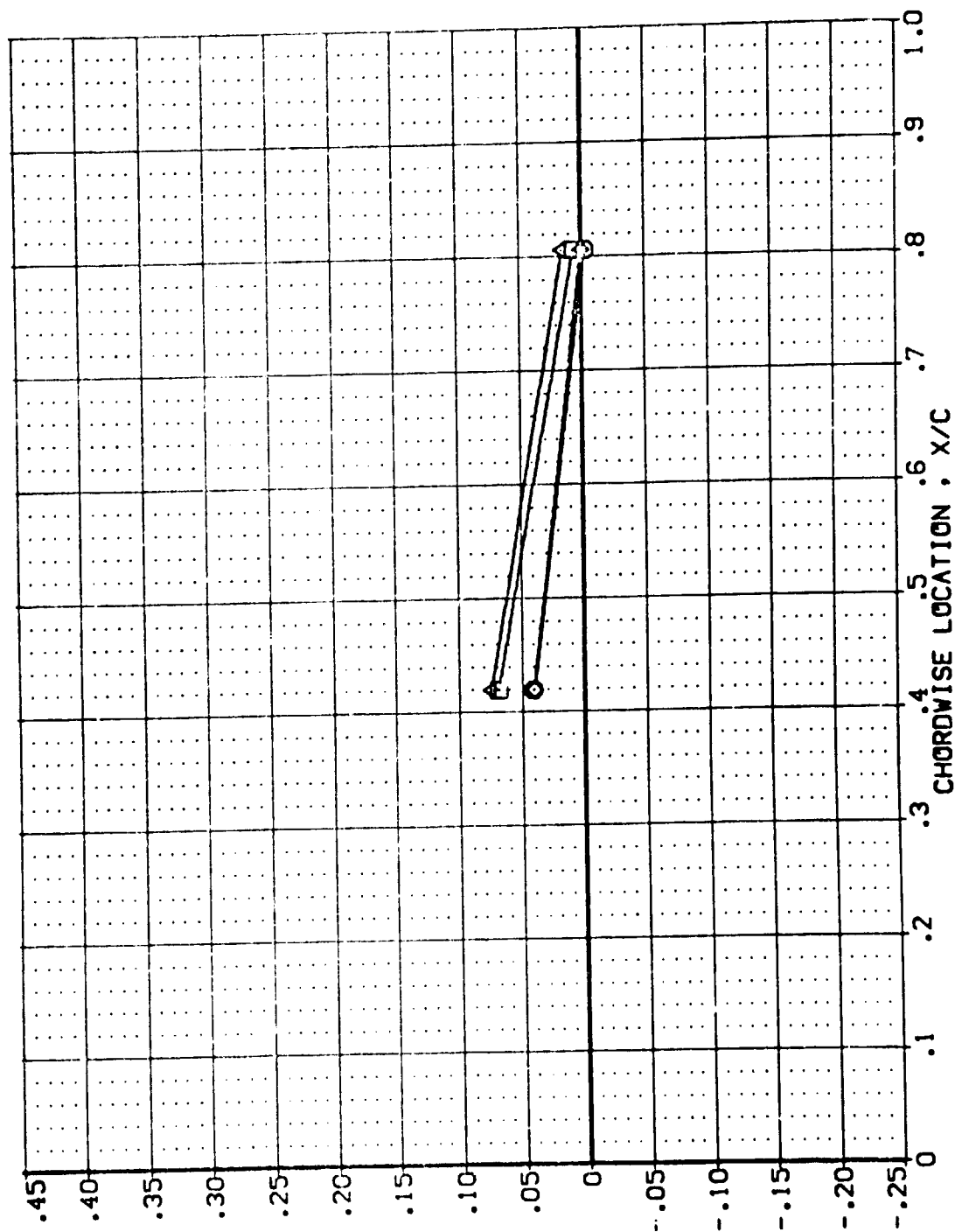
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CFR	SRPR	GIMBAL
(LBZ046)	AVES 87-710	1.000	23.860	.826	1.000
(LBZ050)	AVES 87-710	1.000	23.860	.826	1.000
(LBZ118)	AVES 87-710	1.000	23.860	.826	1.000
(LBZ121)	AVES 87-710	1.000	23.860	.826	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .299

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	DPR	SRPR	GIMBAL
(LBZ046)	AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LBZ050)	AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LBZ118)	AMES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LBZ121)	AMES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE	1.000	23.860	.826	1.000

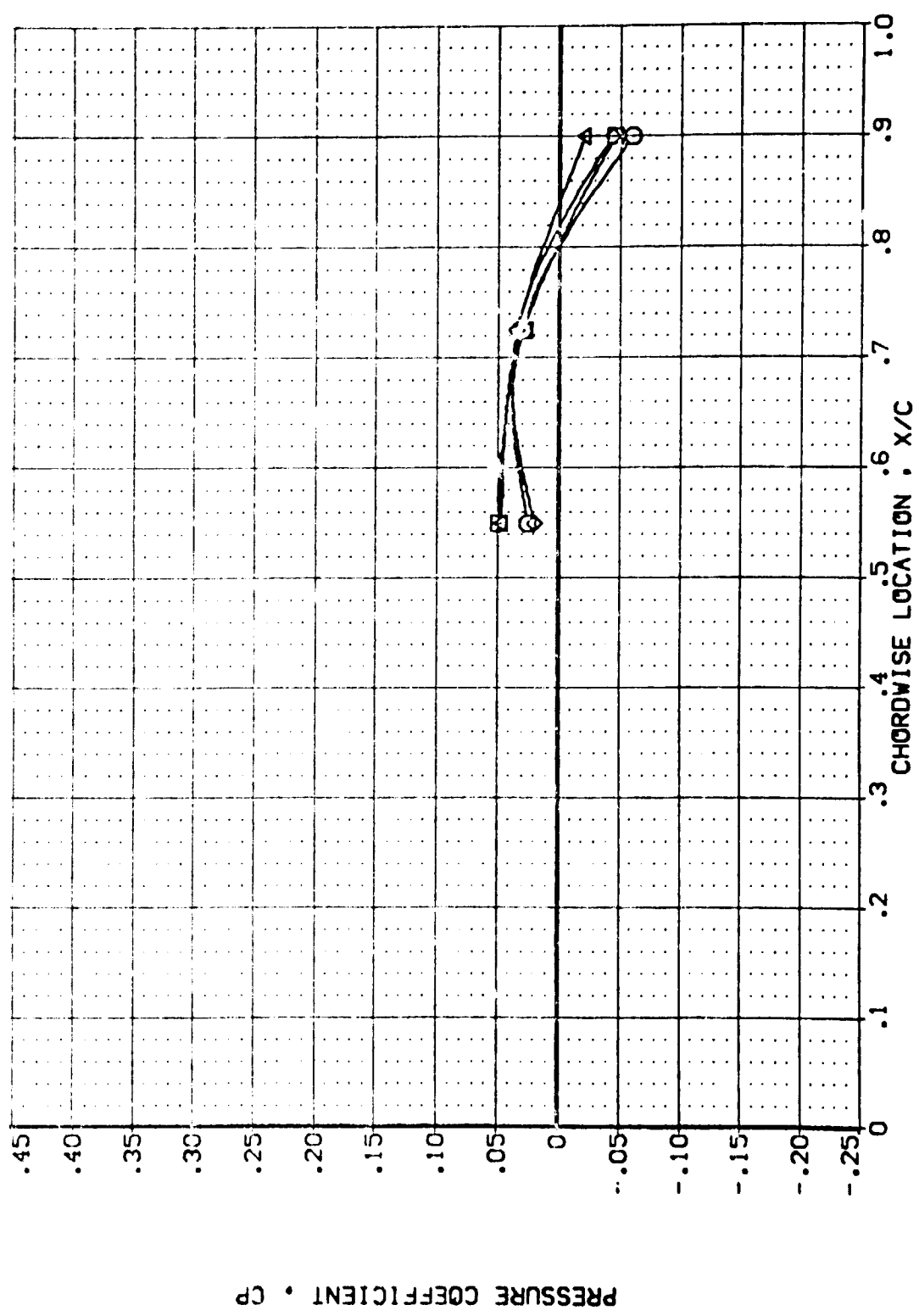


PRESSURE COEFFICIENT • CP

PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .427

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SGRPR	GIMBAL
(LBZ046)	AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	.000			1.000
(LBZ050)	AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LBZ118)	AVES 87-710 [A12C 01 T1 S2] LOWER WING PRESSURE	1.000			1.000
(LBZ121)	AVES 87-710 [A12C 01 T1 S2] LOWER WING PRESSURE	1.000	23.860	.826	1.000

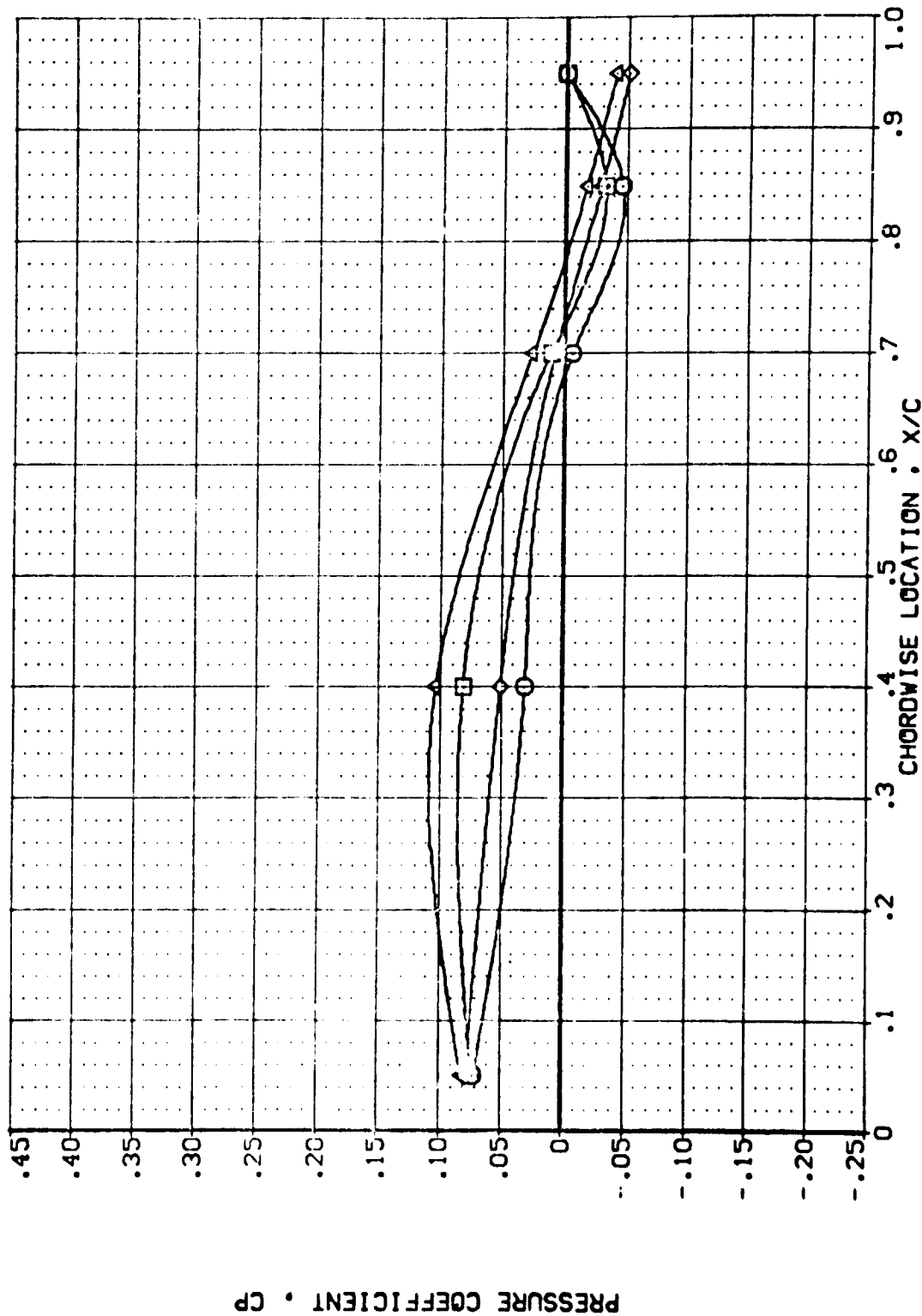


PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ045)	AVES 87-710	IA12C 01	T1	S1	LOWER WING PRESSURE	POWER	OPR	SRMPR	GIMBAL
(LBZ050)	AVES 87-710	IA12C 01	T1	S1	LOWER WING PRESSURE	.000			1.000
(LBZ118)	AVES 87-710	IA12C 01	T1	S2	LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LBZ121)	AVES 87-710	IA12C 01	T1	S2	LOWER WING PRESSURE	1.000	23.860	.826	1.000



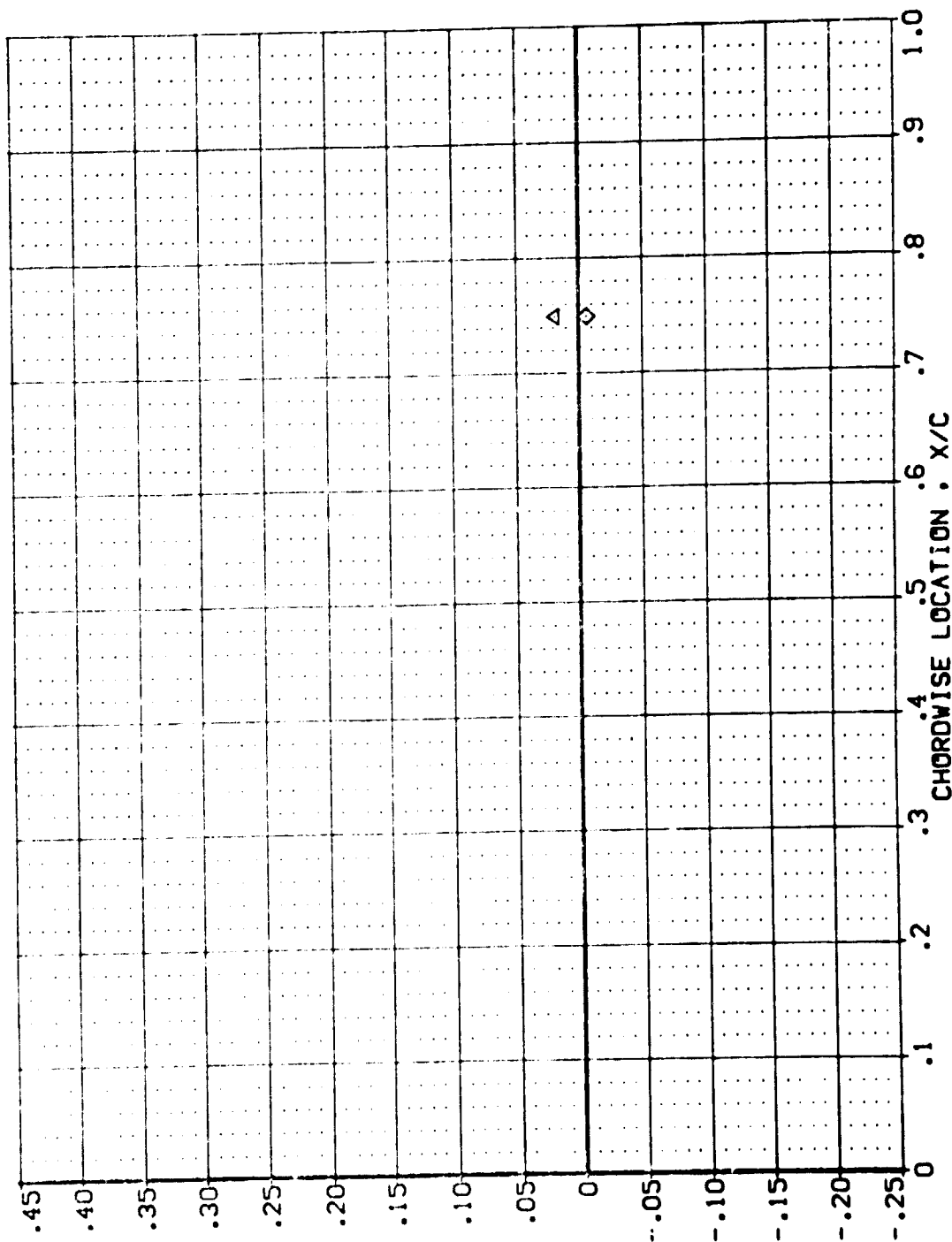
PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .673

DATA SET SYMBOL: QX
 (LB7045)
 (LB7050)
 (LB7116)
 (LB7121)

CONFIGURATION DESCRIPTION:
 AYES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE
 AYES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE
 AYES 87-710 [A12C 01 T1 S2] LOWER WING PRESSURE
 AYES 87-710 [A12C 01 T1 S2] LOWER WING PRESSURE

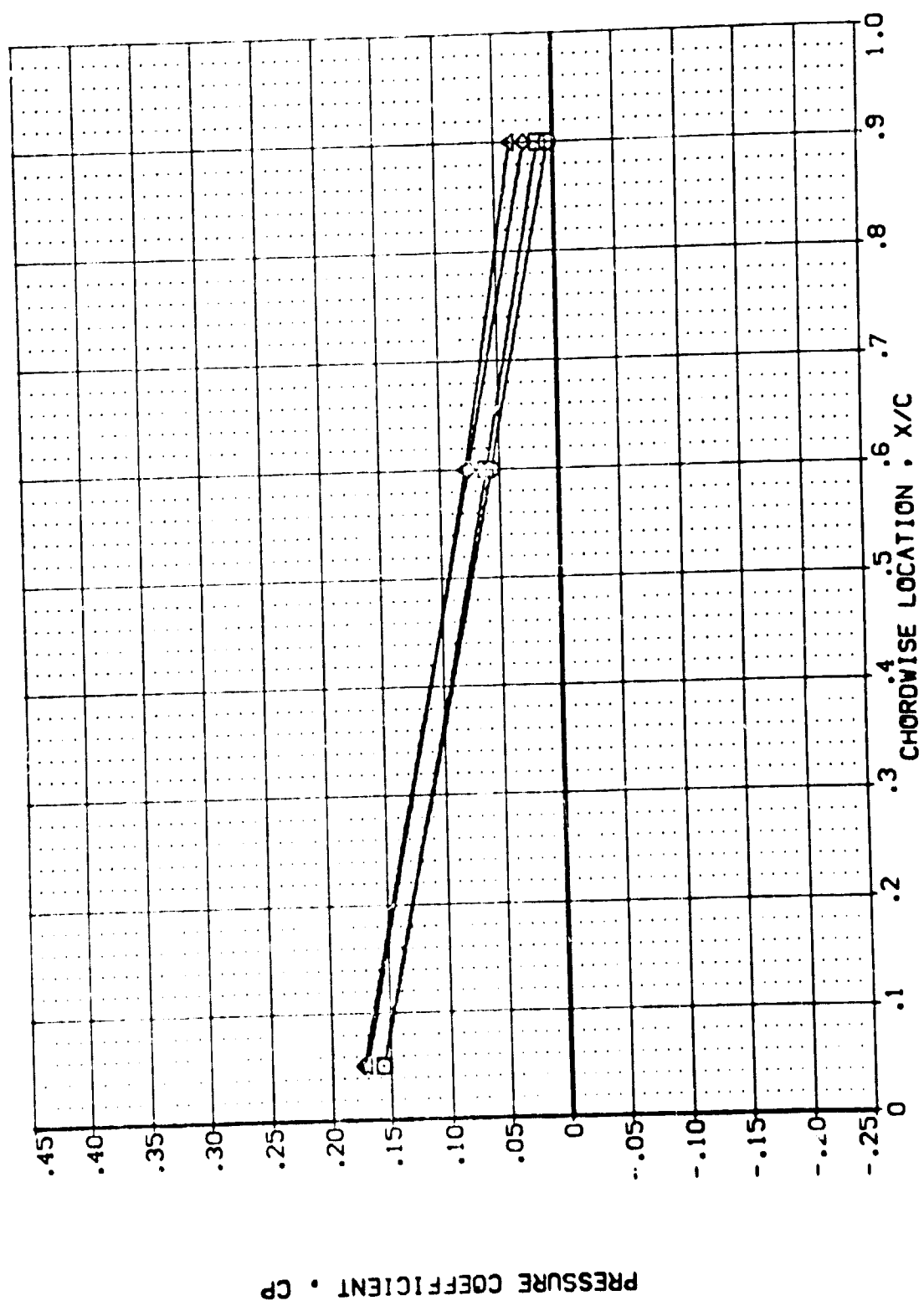
POWER: .000 23.850 .826
 DFR: .000 23.850 .826
 SRFR: .000 23.850 .826
 GIMBAL: 1.000 1.000 1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .780

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SRPR	GIMBAL
(LBZD46)	APES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LBZD50)	APES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LBZ118)	APES 87-710 IALZC 01 T1 S2 LOWER WING PRESSURE	.000			1.000
(LBZ121)	APES 87-710 IALZC 01 T1 S2 LOWER WING PRESSURE	1.000	23.860	.826	1.000

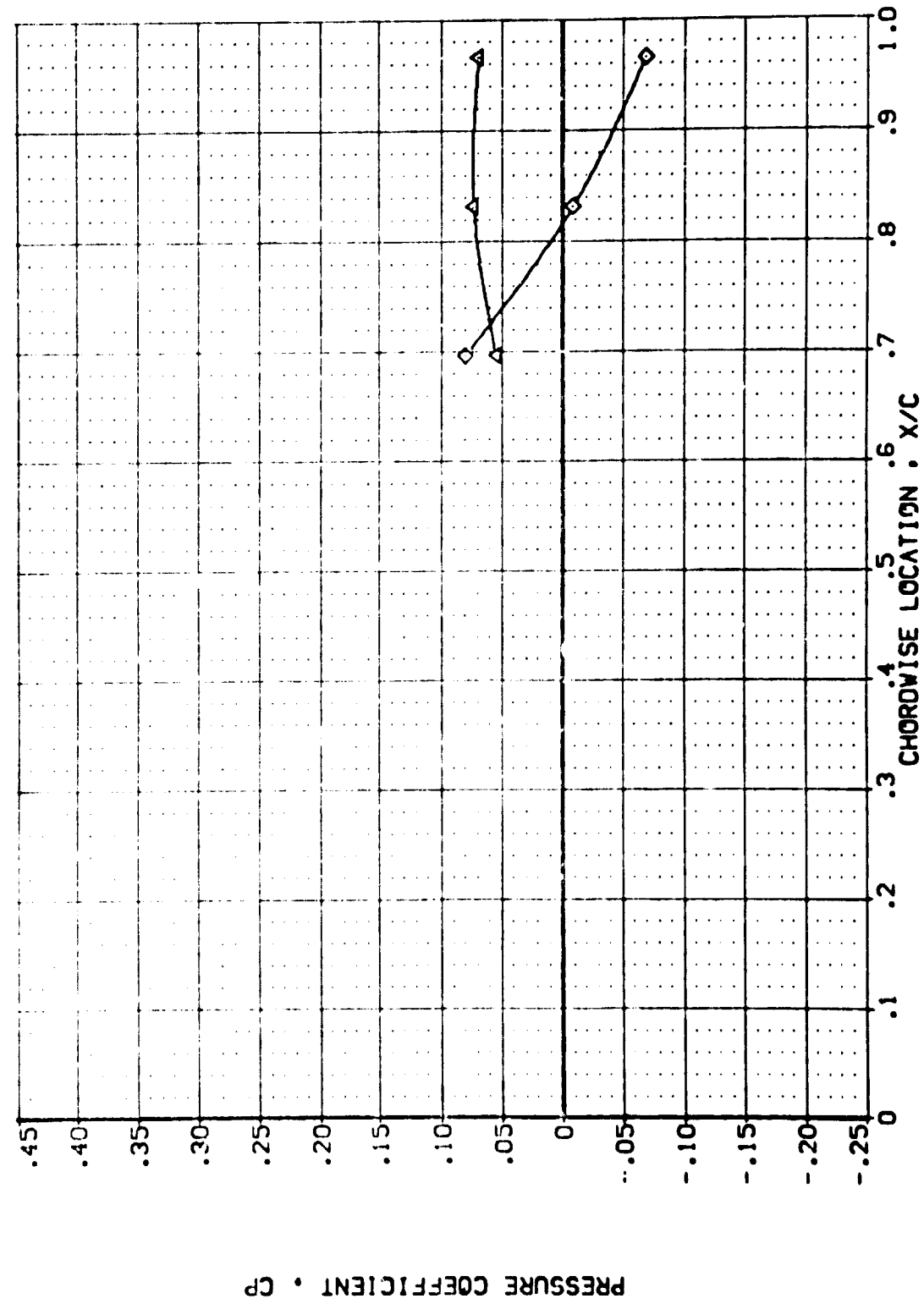


PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .887

PAGE 642

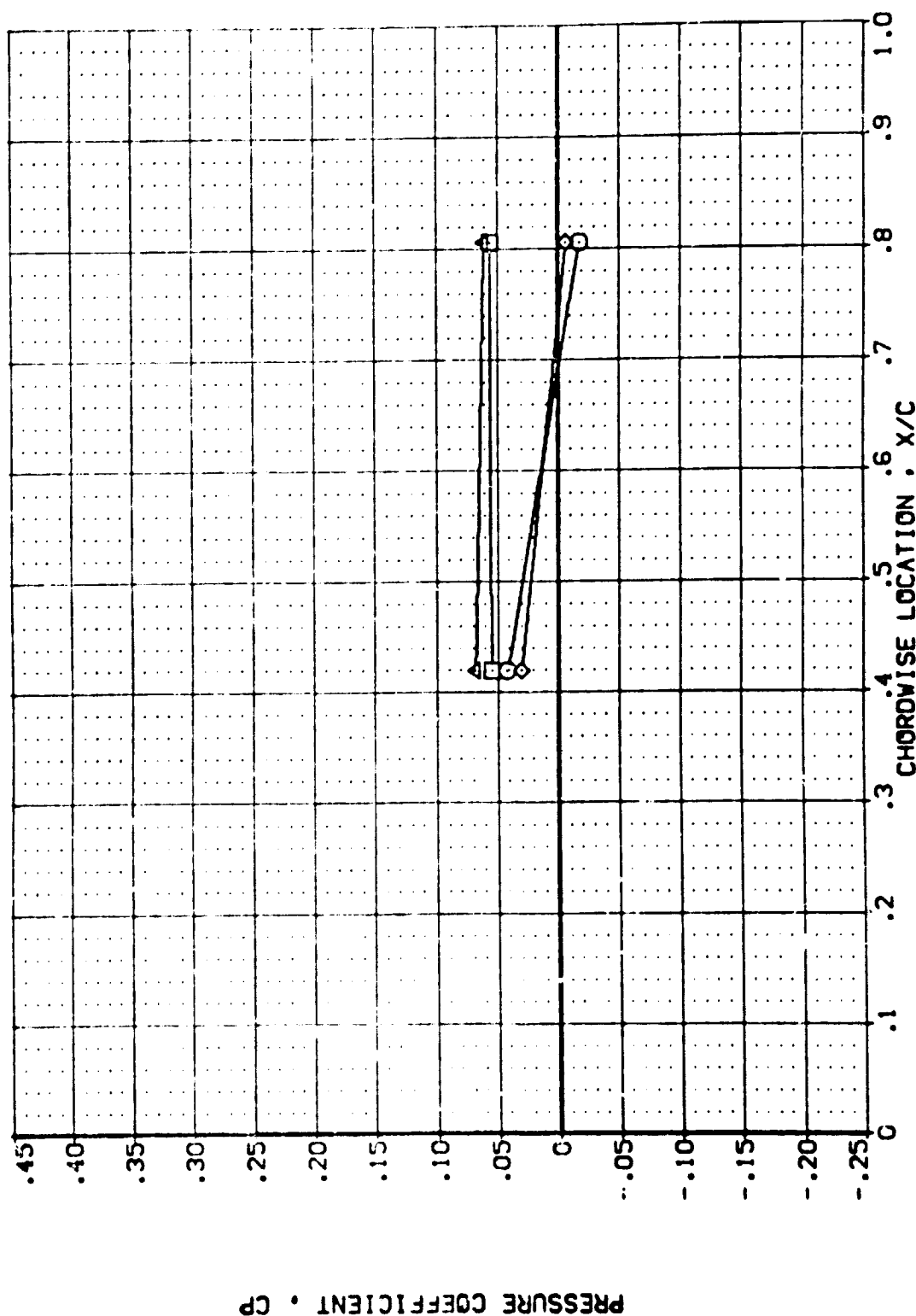
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	CFR	SRPR	GINBAL
(LBT045)	AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	.000	23.860	.826	1.000
(LBT050)	AVES 87-710 [A12C 01 T1 S1] LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LBT051)	AVES 87-710 [A12C 01 T1 S2] LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LBT052)	AVES 87-710 [A12C 01 T1 S2] LOWER WING PRESSURE	1.000	23.860	.826	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER DPR SR-PR GIMBAL

(LB2046)	AVES 87-710	IA12C 01 T1 S1	LOWER WING PRESSURE	.000	23.860	.806	1.000
(LB2050)	AVES 87-710	IA12C 01 T1 S1	LOWER WING PRESSURE	1.000	23.860	.806	1.000
(LB2110)	AVES 87-710	IA12C 01 T1 S2	LOWER WING PRESSURE	.000	23.860	.806	1.000
(LB2121)	AVES 87-710	IA12C 01 T1 S2	LOWER WING PRESSURE	1.000	23.860	.806	1.000

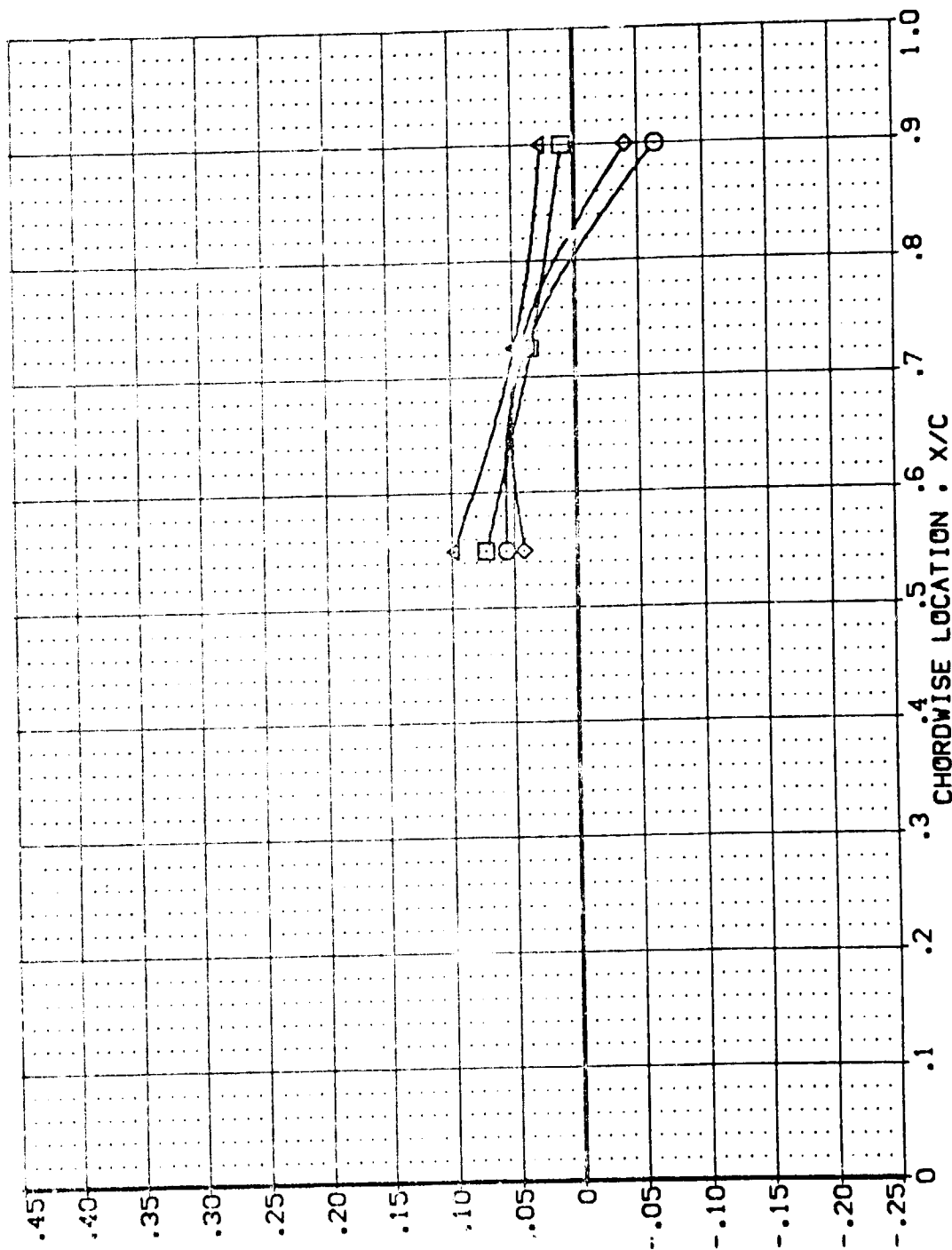


PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .427

PAGE 644

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	Q/R	SRPR	GIMBAL
(LBZ046)	AYES 87-710 [A12C 0] T1 S1 LOWER WING PRESSURE	.000			1.000
(LBZ050)	AYES 87-710 [A12C 0] T1 S1 LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LBZ116)	AYES 87-710 [A12C 0] T1 S2 LOWER WING PRESSURE	.000			1.000
(LBZ121)	AYES 87-710 [A12C 0] T1 S2 LOWER WING PRESSURE	1.000	23.860	.826	1.000



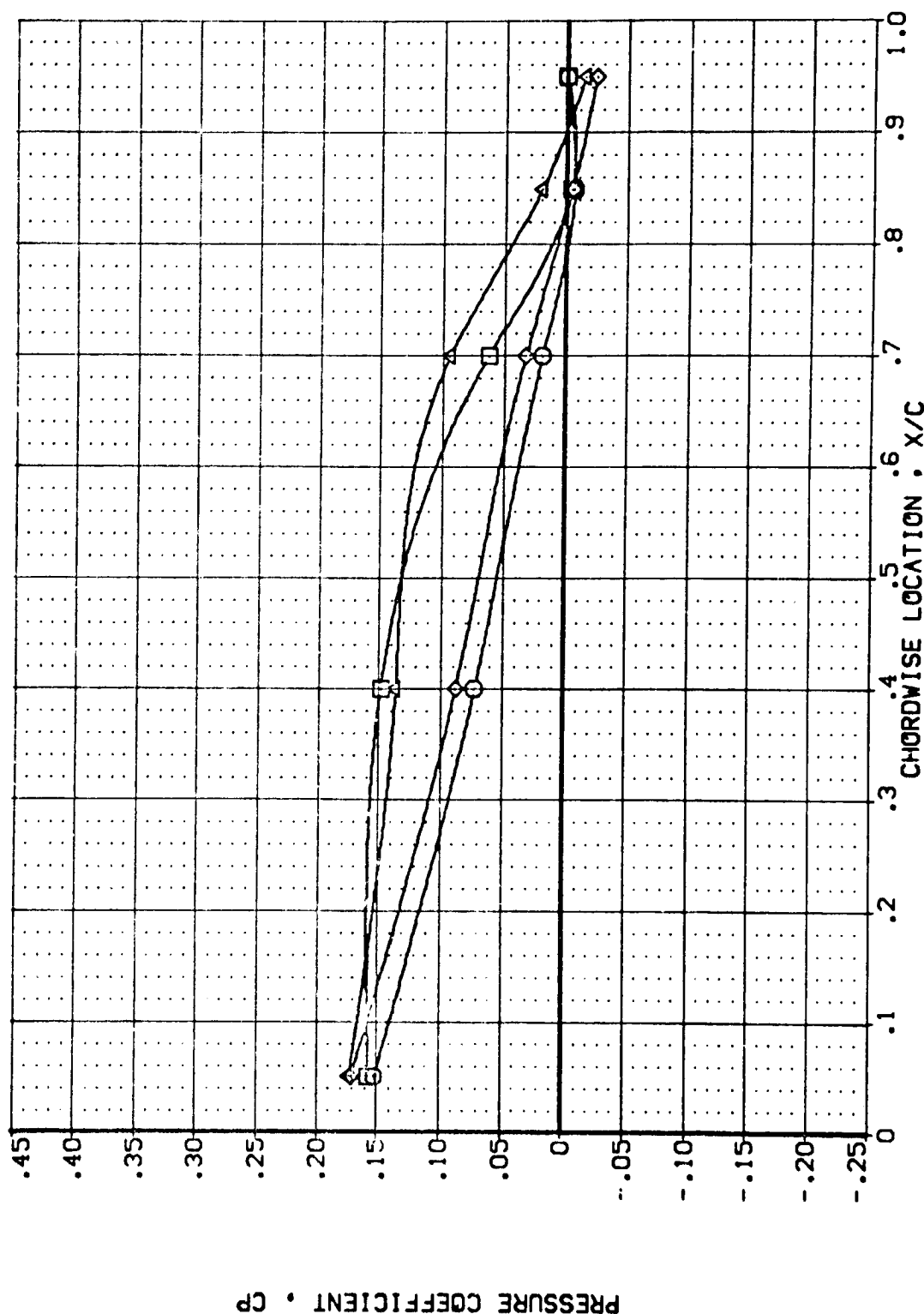
PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	QPR	SWPR	GIMBAL
(LBZ046)	APES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE	.000	23.860	.826	1.000
(LBZ050)	APES 87-710 IALZC 01 T1 S1 LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LBZ118)	APES 87-710 IALZC 01 T1 S2 LOWER WING PRESSURE	.000	23.860	.826	1.000
(LBZ121)	APES 87-710 IALZC 01 T1 S2 LOWER WING PRESSURE	1.000	23.860	.826	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .673

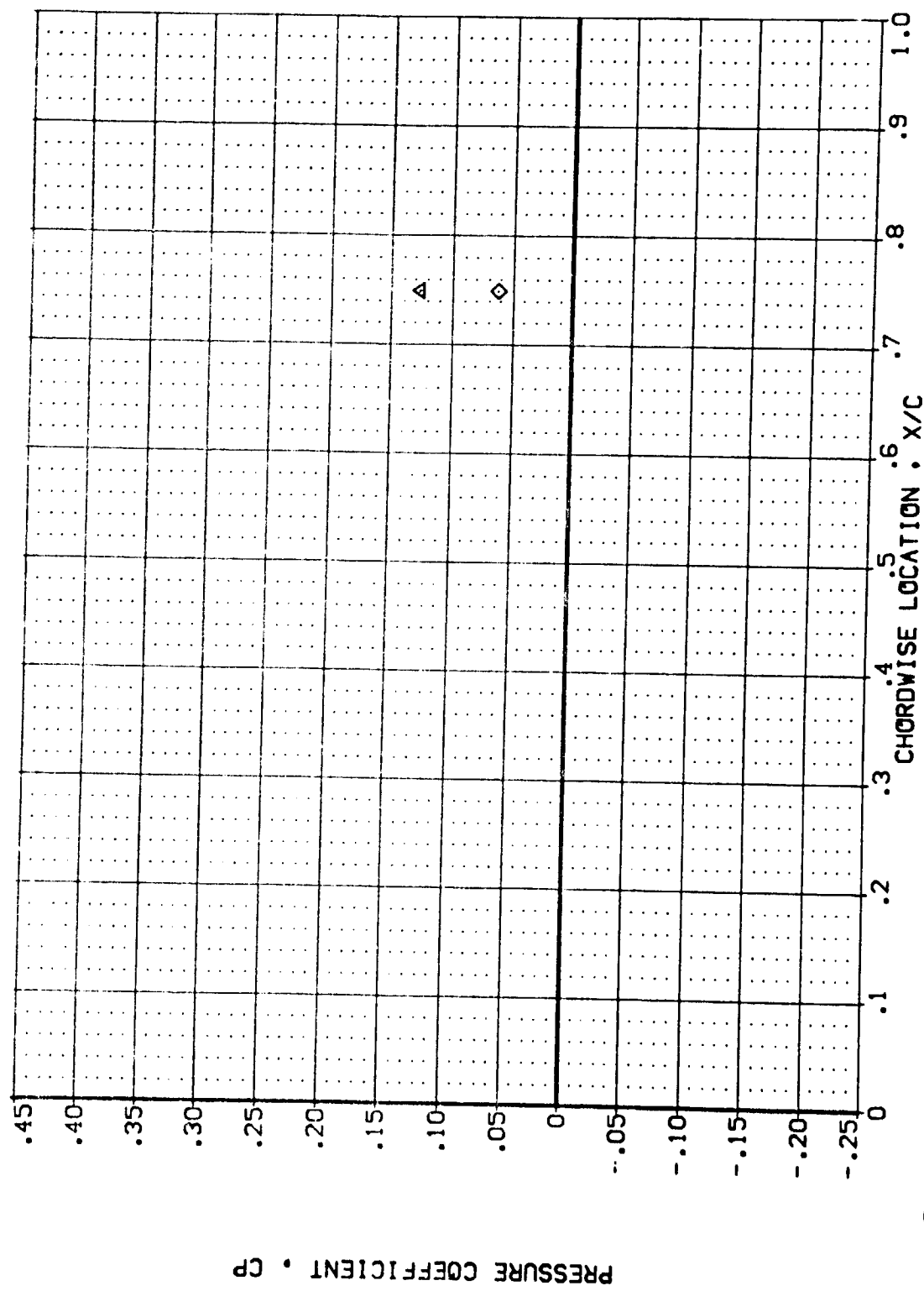
DATA SET SYMBOL
 (LBZ04E)
 (LBZ06E)
 (LBZ11E)
 (LBZ12E)

CONFIGURATION DESCRIPTION
 AYES 87-710
 AYES 87-710
 AYES 87-710
 AYES 87-710

POWER
 .000
 1.000
 1.000
 1.000

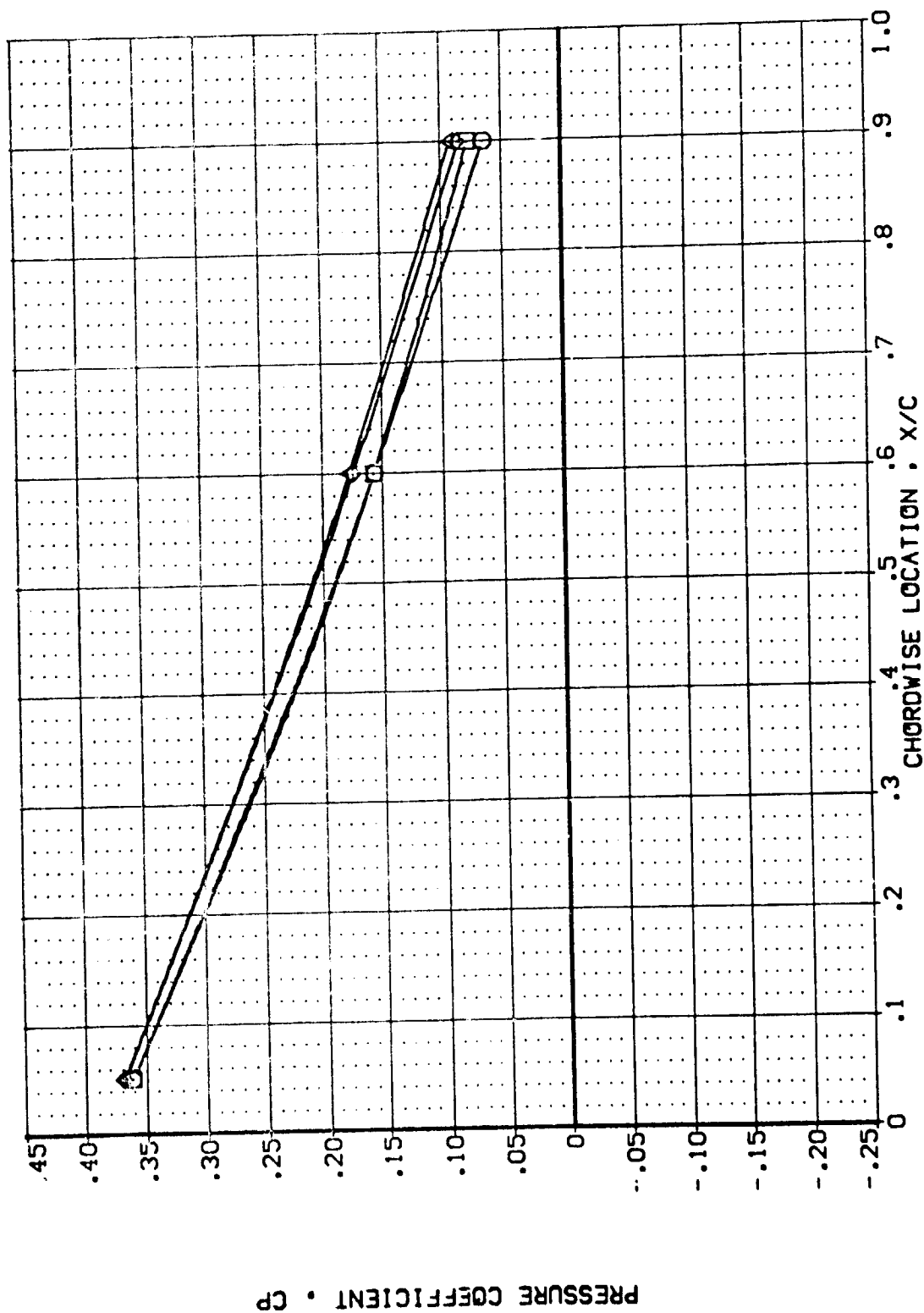
SRMR
 .826
 .826

GIMBAL
 1.000
 1.000
 1.000
 1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM
 MACH = 3.500 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SRPR	GIMBAL
(LR2046)	AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	1.000			1.000
(LB2050)	AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LB2118)	AMES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE	1.000	23.860	.826	1.000
(LB2121)	AMES 87-710 IAI2C 01 T1 S2 LOWER WING PRESSURE	1.000	23.860	.826	1.000



PLUME AND SRB POSITION EFFECT ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ122) Q AYES 87-710 [A12C 01 T1] UPPER WING PRESSURE

(LBZ125) Q AYES 87-710 [A12C 01 T1] UPPER WING PRESSURE

(LBZ126) X AYES 87-710 [A12C 03 T1] UPPER WING PRESSURE

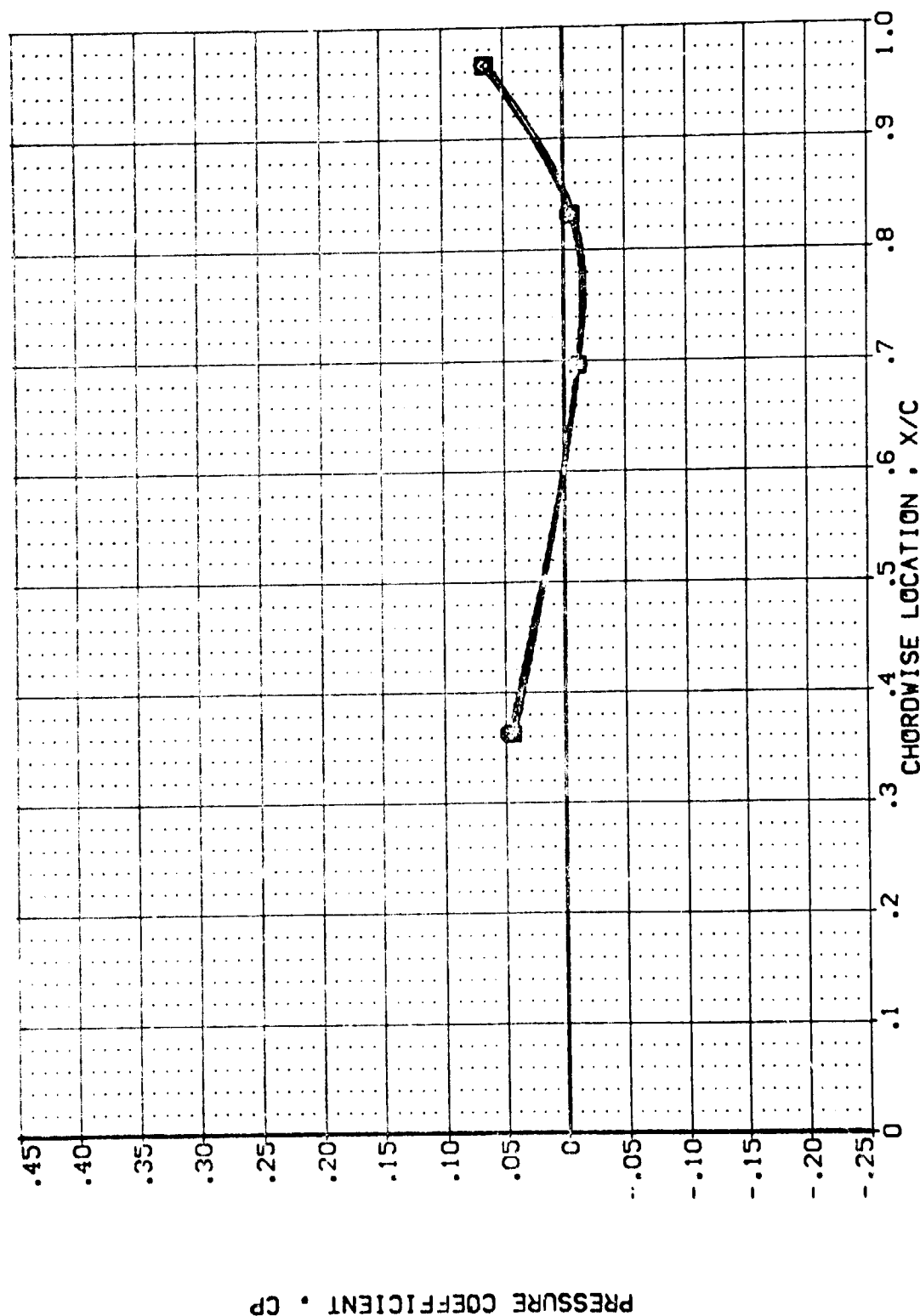
(LBZ127) X AYES 87-710 [A12C 04 T1] UPPER WING PRESSURE

POWER CTR SNRPR GIMBAL

1.000 23.860 1.000 1.000

3.000 23.860 1.000 1.000

3.000 23.860 1.000 1.000



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .299 PAGE 649

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ122)
(LBZ125)
(LBZ126)
(LBZ127)

AVES 87-710 IAL2C 01 T
AVES 87-710 IAL2C 51 T
AVES 87-710 IAL2C 03 T
AVES 87-710 IAL2C 04 T

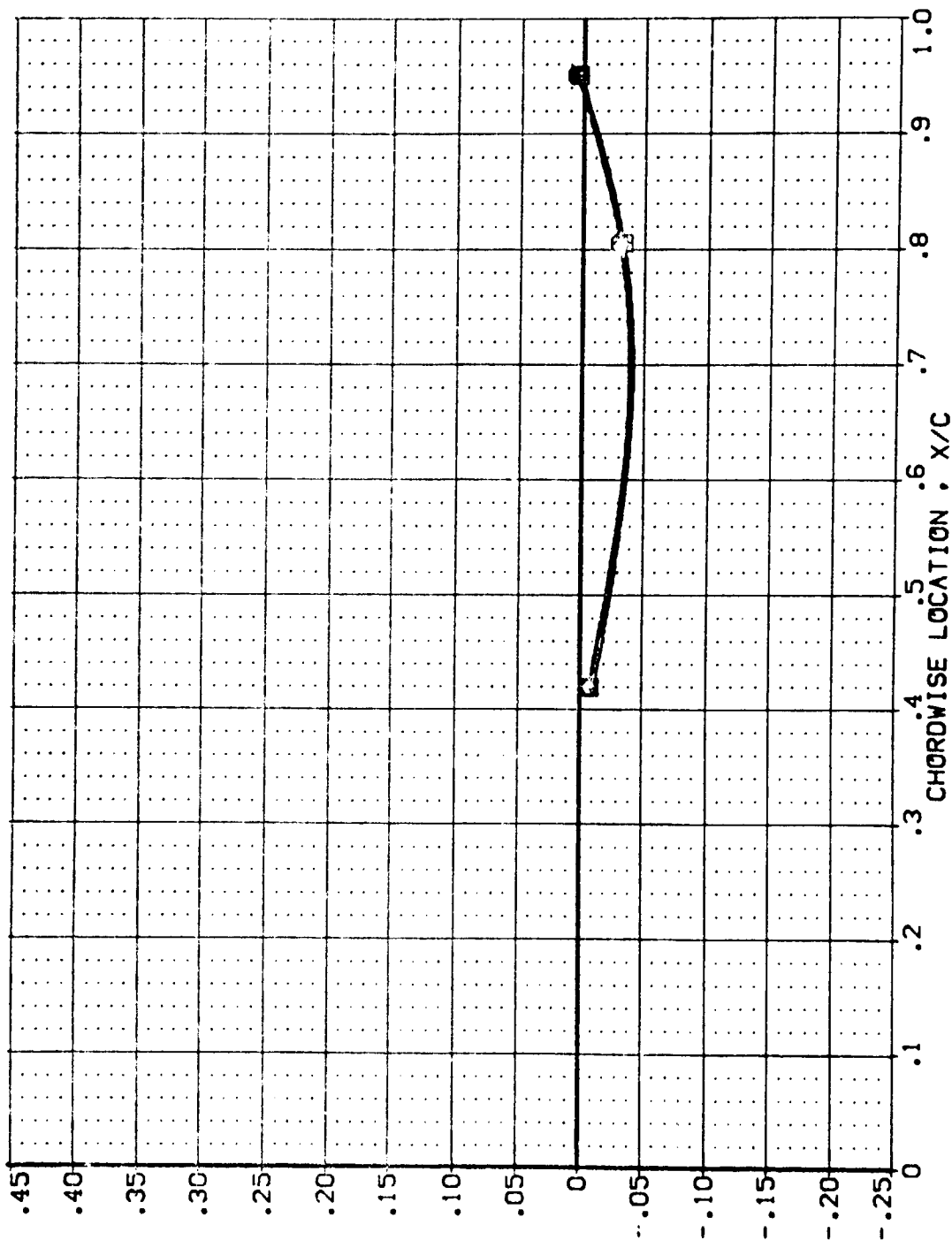
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER 0.000 23.860
3.000 23.860
3.000 23.860

SWPR

GIMBAL

1.000
1.000
1.000



PRESSURE COEFFICIENT, CP

CHORDWISE LOCATION, X/C

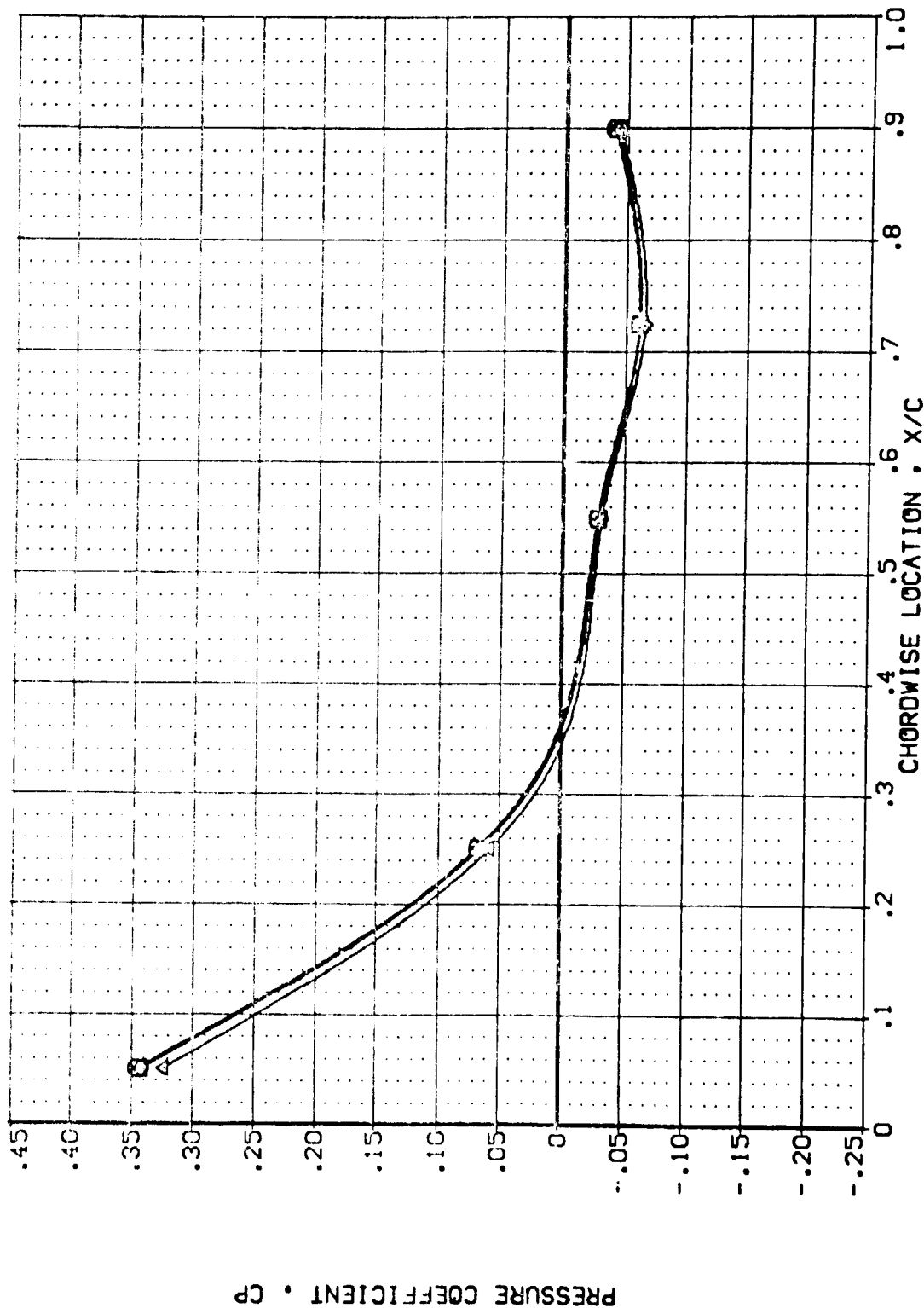
SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .427

PAGE 650

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZ)22) AYES 87-710 [A]2C 01 T1
 (UBZ)26) AYES 87-710 [A]2C 01 T1
 (UBZ)26) AYES 87-710 [A]2C 03 T1
 (UBZ)27) AYES 87-710 [A]2C 04 T1

POWER CDR SRRPR GIMBAL
 .000 23.850 1.000
 3.000 23.850 1.000
 3.000 23.850 1.000



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .534

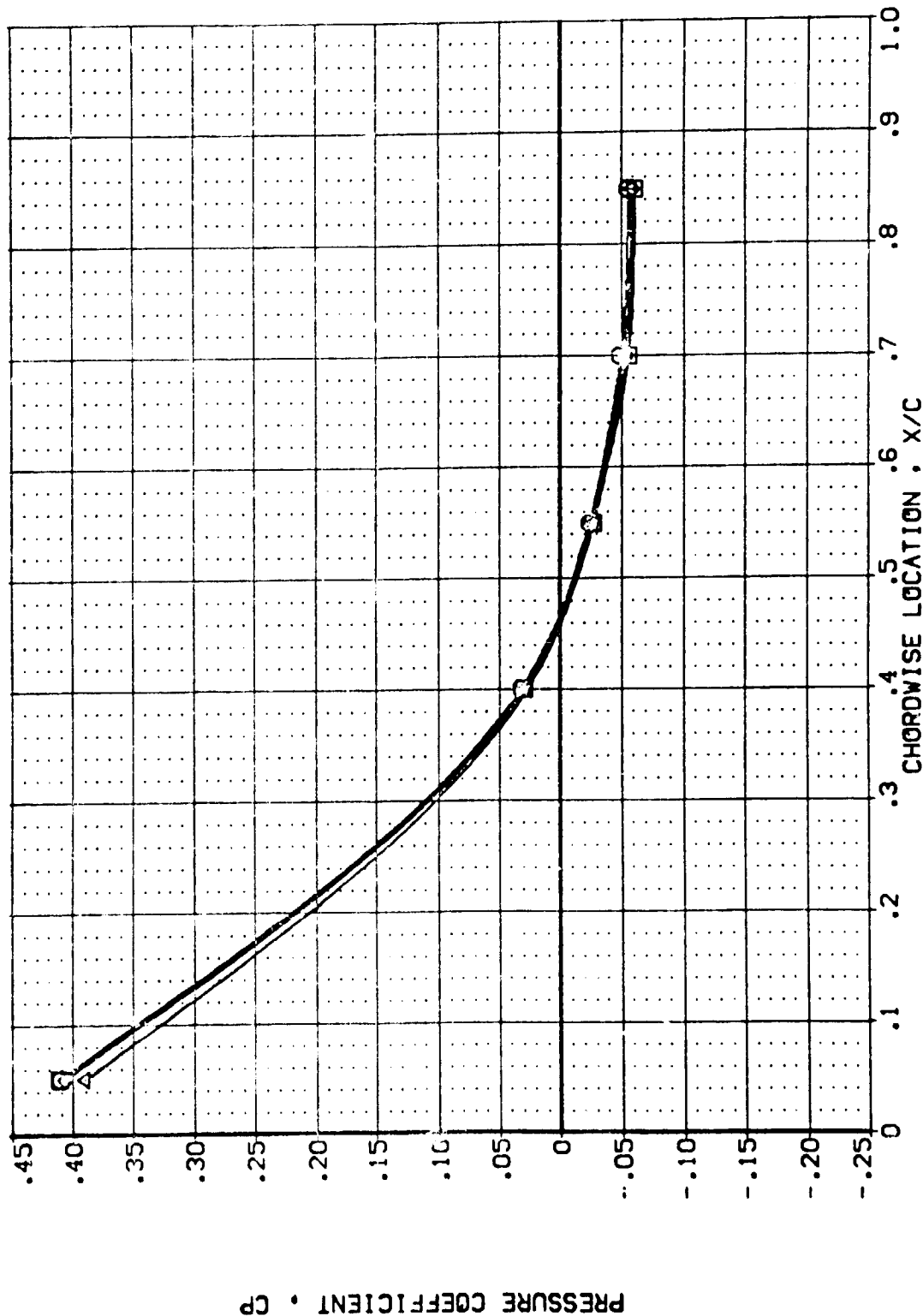
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ122)
(LBZ125)
(LBZ126)
(LBZ127)

AVES 87-710 IAI2C 01 T1
AVES 87-710 IAI2C 01 T1
AVES 87-710 IAI2C 03 T1
AVES 87-710 IAI2C 04 T1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER DPR SRPR GIMBAL
3.000 23.860 1.000
3.000 23.860 1.000
3.000 23.860 1.000

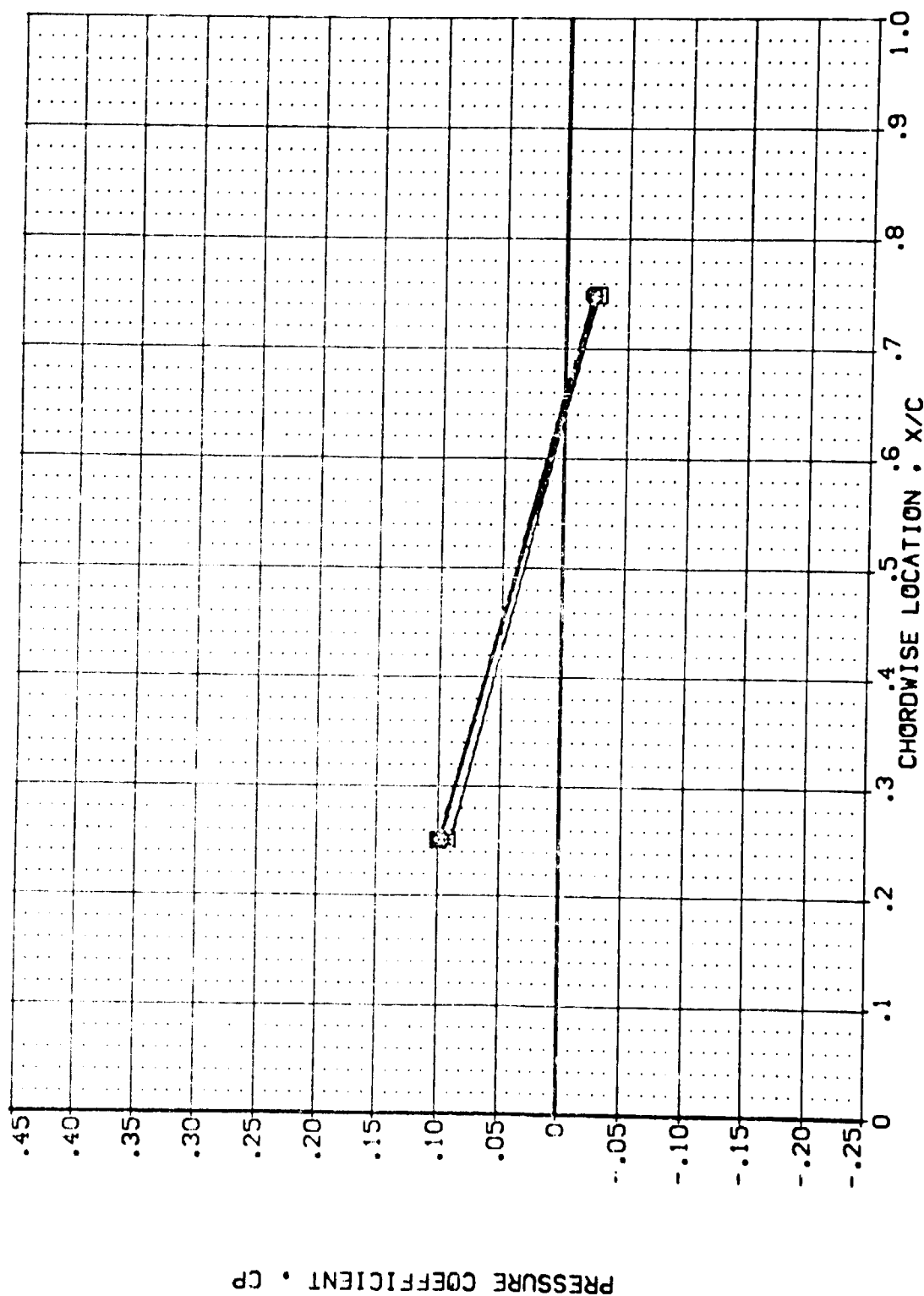


SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[URZ]22)	AVES 87-710	[A]2C	D1	T1	UPPER WING PRESSURE	POWER	OPR	SR-PR	GIMBAL
[URZ]23)	AVES 87-710	[A]2C	D1	T1	UPPER WING PRESSURE	.000	23.860		1.000
[URZ]25)	AVES 87-710	[A]2C	D1	T1	UPPER WING PRESSURE	3.000	23.860		1.000
[URZ]26)	AVES 87-710	[A]2C	D3	T1	UPPER WING PRESSURE	3.000	23.860		1.000
[URZ]27)	AVES 87-710	[A]2C	D4	T1	UPPER WING PRESSURE	3.000	23.860		1.000



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ122)
(UBZ125)
(UBZ126)
(UBZ127)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 T1
IA12C 01 T1
IA12C 03 T1
IA12C 04 T1

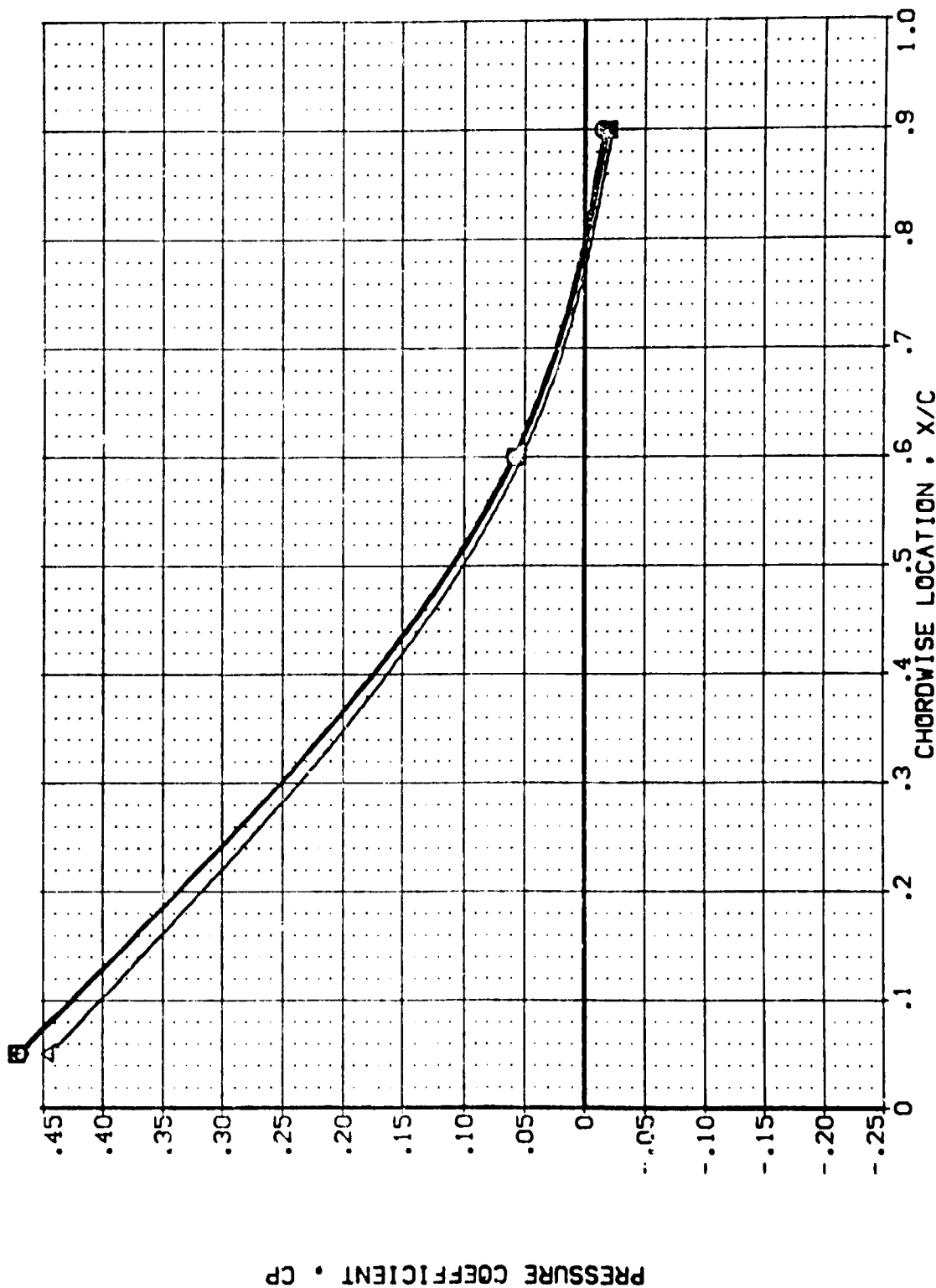
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER 3.000
POWER 3.000
POWER 3.000
POWER 3.000

DPR 23.860
DPR 23.860
DPR 23.860
DPR 23.860

SRPR 1.000
SRPR 1.000
SRPR 1.000
SRPR 1.000

GIMBAL 1.000
GIMBAL 1.000
GIMBAL 1.000
GIMBAL 1.000



PRESSURE COEFFICIENT • CP

SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .887

PAGE 654

DATA SET SYMBOL CONFIGURATION DESCRIPTION

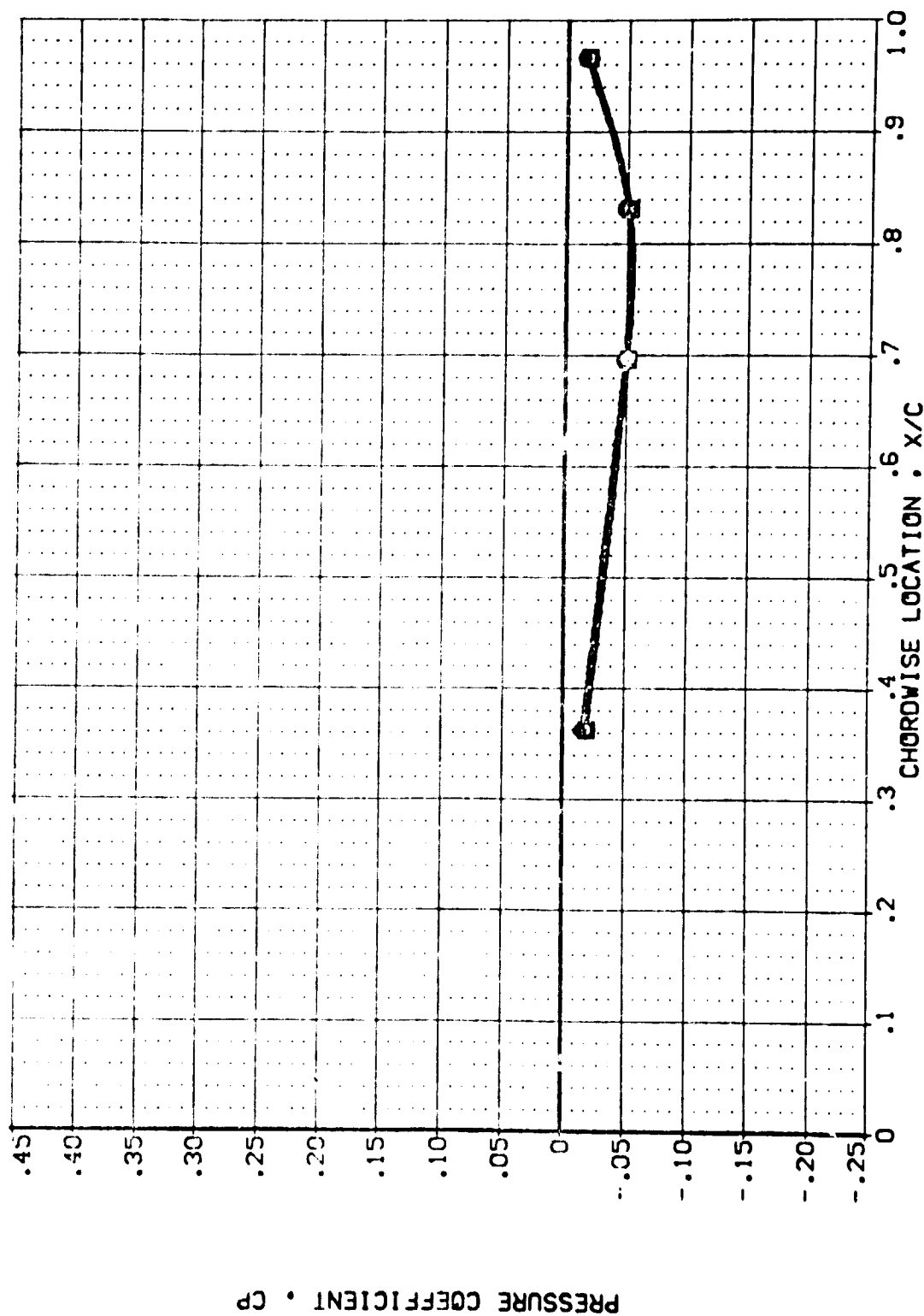
(U12) 22)
(U12) 25)
(U12) 26)
(U12) 27)

AVES B7-710
AVES B7-710
AVES B7-710
AVES B7-710

IA12C J1 T1
IA12C D1 T1
IA12C D3 T1
IA12C D4 T1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER C/P SR-PR G/HBAL
.000 23.860 1.000
3.000 23.860 1.000
3.000 23.860 1.000
3.000 23.860 1.000



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .299

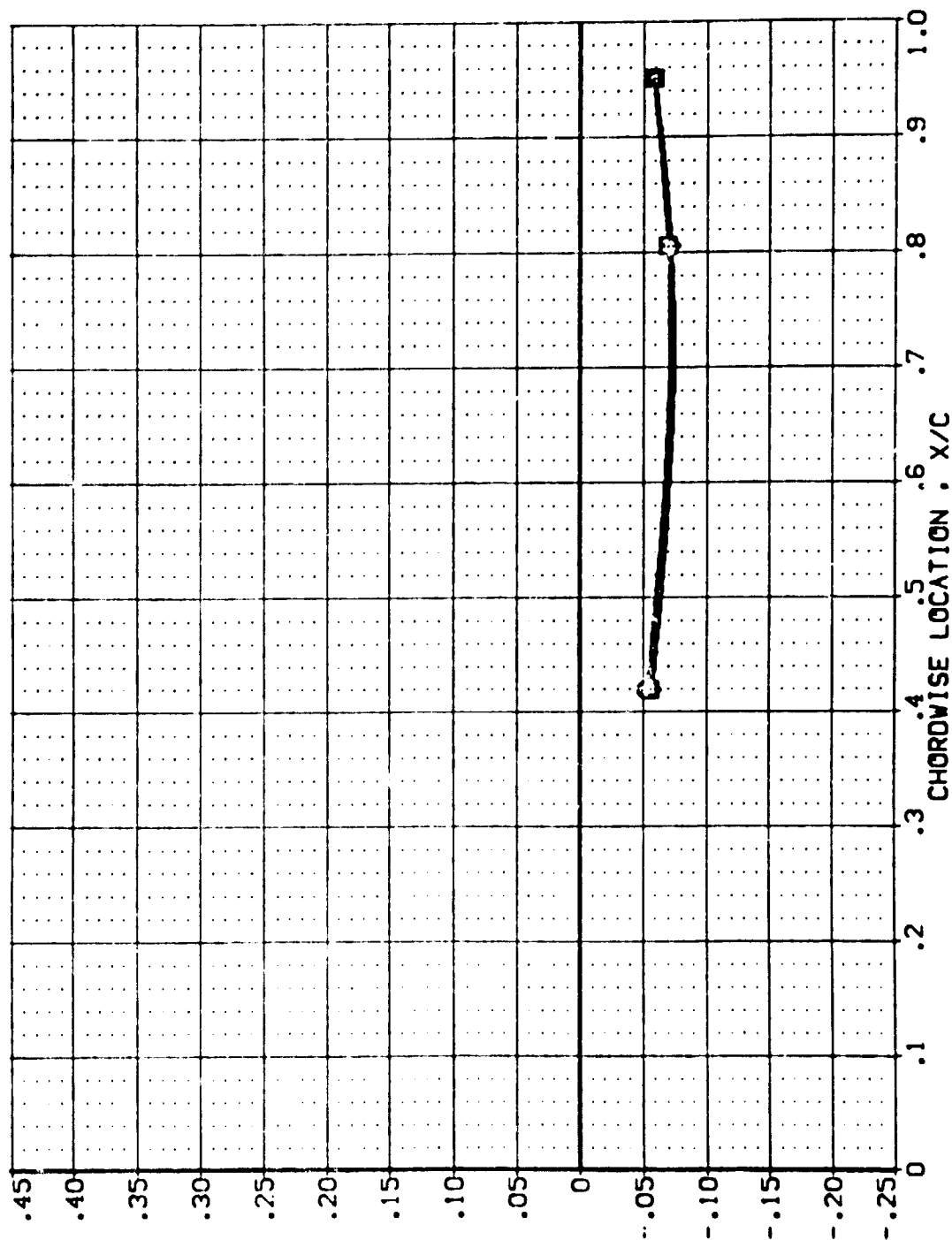
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER QPR SHPR GIMBAL

(UBZ122) ASES 87-710 IAI2C 01 T1 .000 23.860 1.000

(UBZ125) ASES 87-710 IAI2C 01 T1 3.000 23.860 1.000

(UBZ126) ASES 87-710 IAI2C 03 T1 3.000 23.860 1.000

(UBZ127) ASES 87-710 IAI2C 04 T1 3.000 23.860 1.000



PRESSURE COEFFICIENT, CP

CHORDWISE LOCATION, X/C

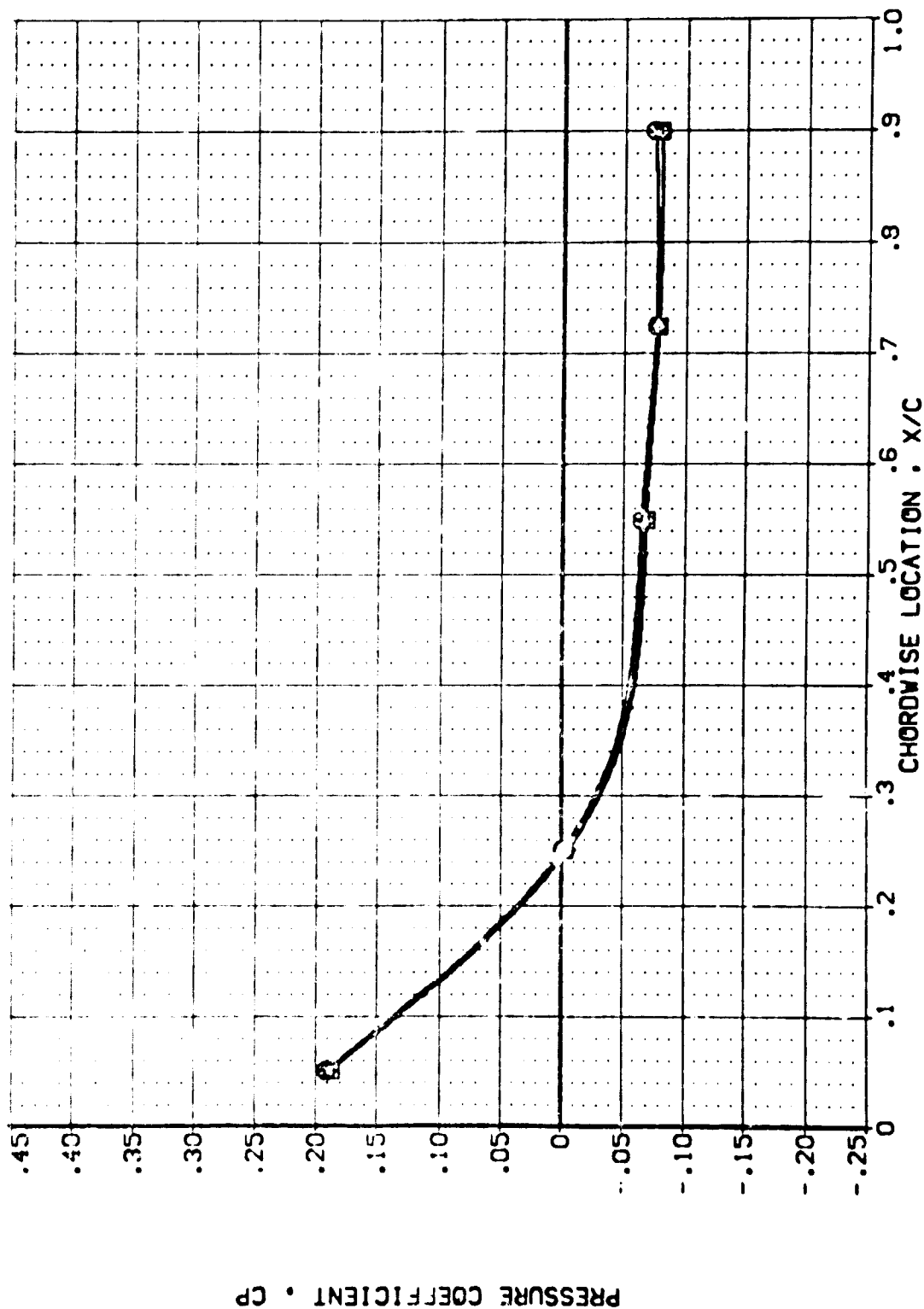
SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .427

PAGE 656

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (U2122) ASES 87-710 IAL2C 01 T1
 (U2125) ASES 87-710 IAL2C 01 T1
 (U2126) ASES 87-710 IAL2C 03 T1
 (U2127) ASES 87-710 IAL2C 04

UPPER WING PRESSURE
 UPPER WING PRESSURE
 UPPER WING PRESSURE
 UPPER WING PRESSURE
 POWER 0.000 23.860
 3.000 23.860
 3.000 23.860
 3.000 23.860
 GIMBAL 1.000
 1.000
 1.000
 1.000

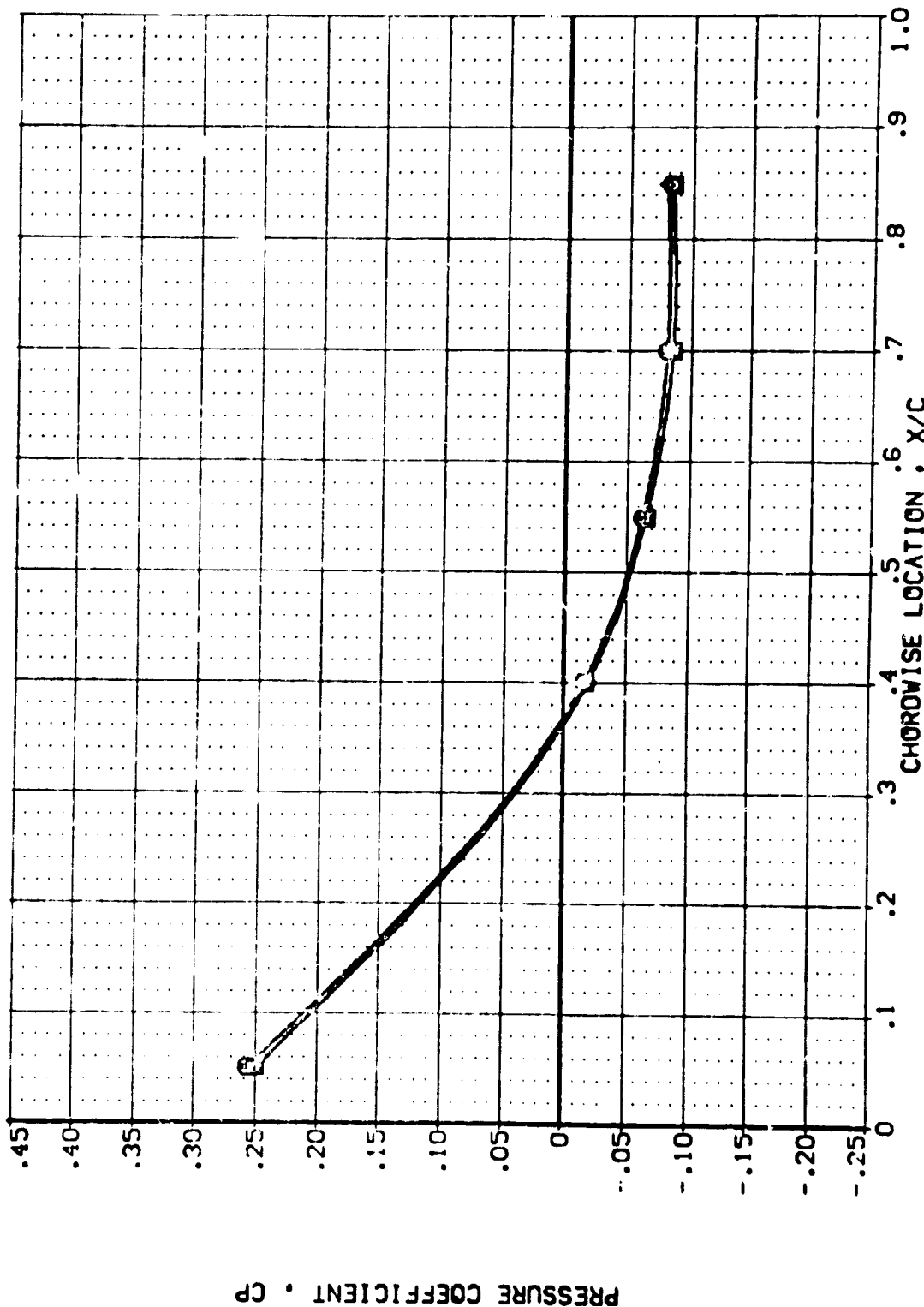


SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ)22)	AVES 87-710	1A12C 01 T1	UPPER WING PRESSURE	POWER	OPR	SP-PR	QIMBAL
(UBZ)23)	AVES 87-710	1A12C 01 T1	UPPER WING PRESSURE	.000	23.860		1.000
(UBZ)26)	AVES 87-710	1A12C 03 T1	UPPER WING PRESSURE	3.000	23.870		1.000
(UBZ)27)	AVES 87-710	1A12C 04 T1	UPPER WING PRESSURE	3.000	23.860		1.000



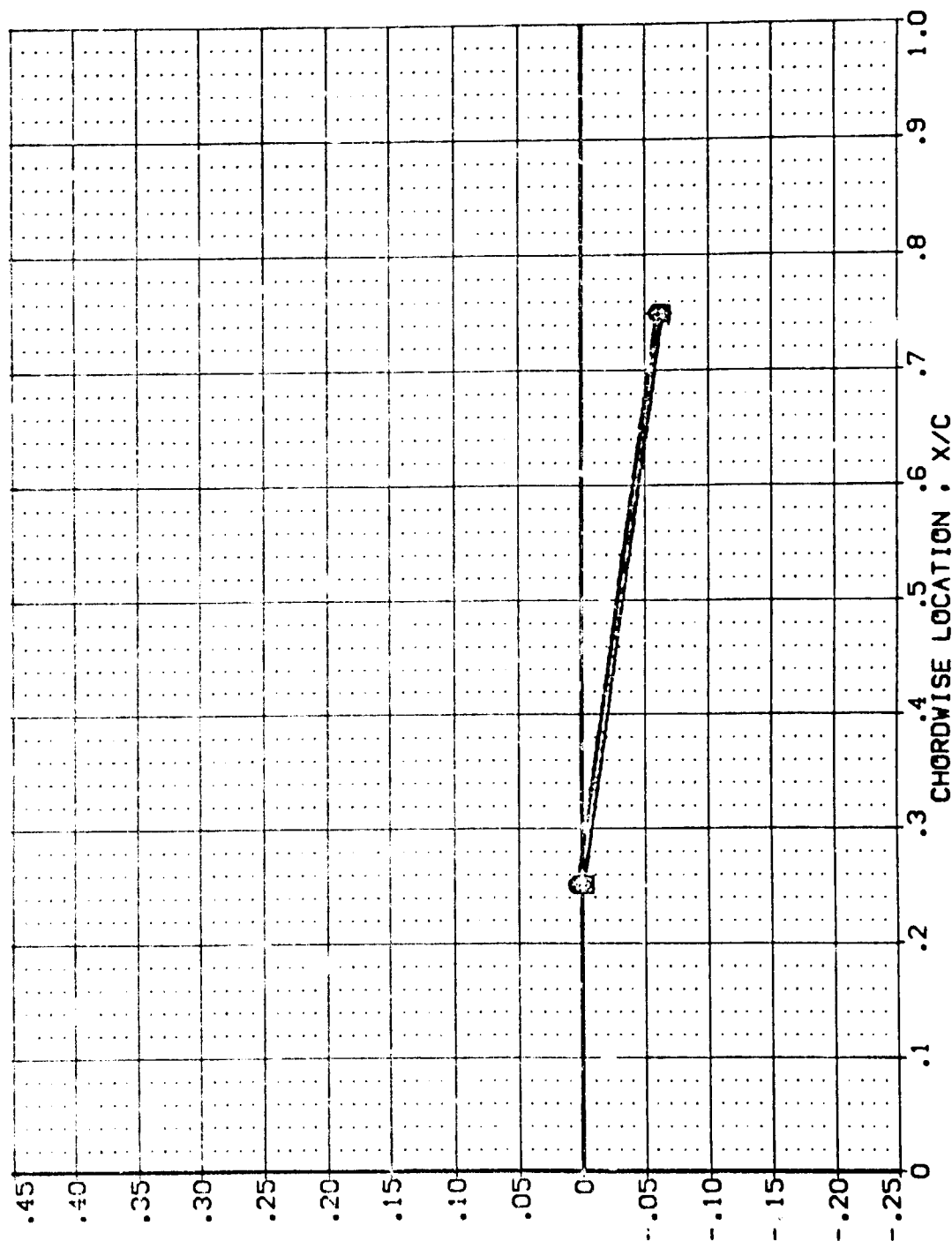
SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (UBZ122) ASES 87-710 IAI2C 01 T1
 (UBZ125) ASES 87-710 IAI2C 01 T1
 (UBZ126) ASES 87-710 IAI2C 03 T1
 (UBZ127) ASES 87-710 IAI2C 04 T1

POWER DPR SDRP GIMBAL
 .000 23.860 1.000
 3.000 23.860 1.000
 3.000 23.860 1.000

UPPER WING PRESSURE
 UPPER WING PRESSURE
 UPPER WING PRESSURE
 UPPER WING PRESSURE

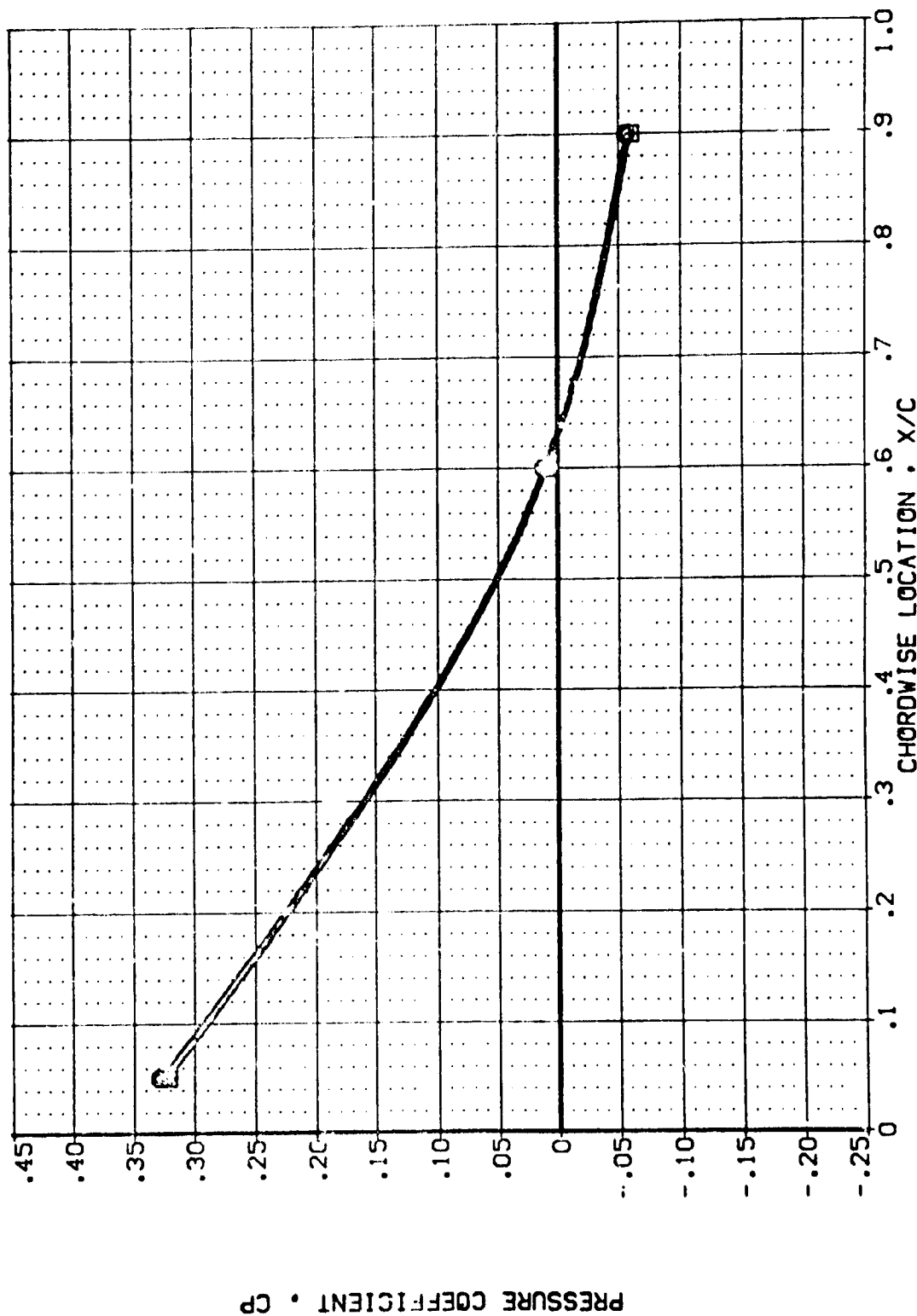


SECOND STAGE ORBITER ENGINE-GUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ122)	AVES 87-710	IA12C 01 T1	UPPER WING PRESSURE	POWER	DPR	SP-PR	GIMBAL
(UBZ125)	AVES 87-710	IA12C 01 T1	UPPER WING PRESSURE	3.000	23.860		1.000
(UBZ126)	AVES 87-710	IA12C 03 T1	UPPER WING PRESSURE	3.000	23.860		1.000
(UBZ127)	AVES 87-710	IA12C 04 T1	UPPER WING PRESSURE	3.000	23.860		1.000



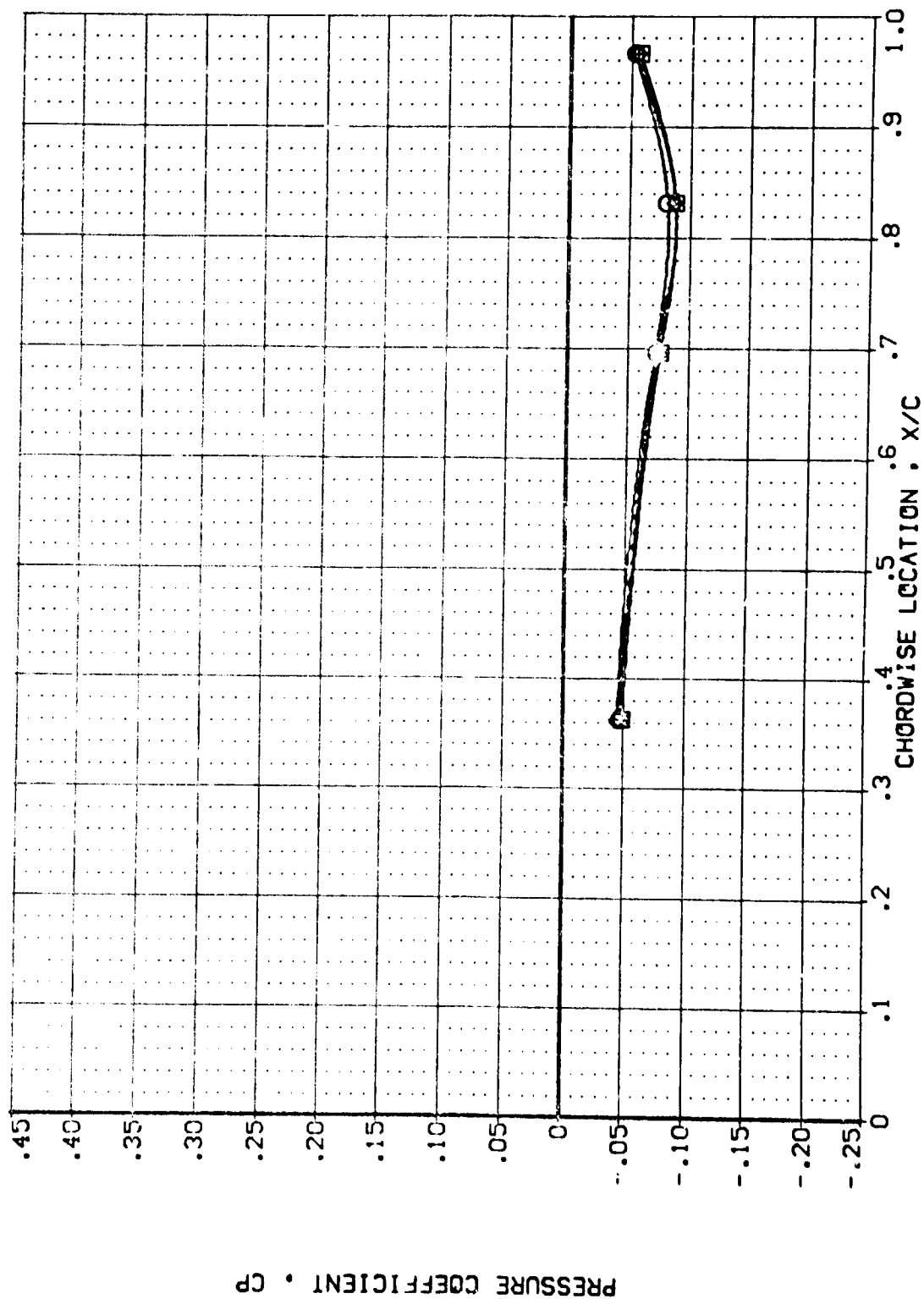
SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .887

PAGE 660

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(U32)22)	AVES 87-710	1A12C 01 T1	UPPER WING PRESSURE	POWER	OPR	SR-PR	GIMBAL
(U32)25)	AVES 87-710	1A12C 01 T1	UPPER WING PRESSURE	3.000	23.860		1.000
(U32)26)	AVES 87-710	1A12C 03 T1	UPPER WING PRESSURE	3.000	23.860		1.000
(U32)27)	AVES 87-710	1A12C 04 T1	UPPER WING PRESSURE	3.000	23.860		1.000



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL

(UBZ122)
(UBZ125)
(UBZ126)
(UBZ127)

CONFIGURATION DESCRIPTION

AMES 87-710 IAI2C 01 T1
AMES 87-710 IAI2C 01 T1
AMES 87-710 IAI2C 03 T1
AMES 87-710 IAI2C 04 T1

POWER

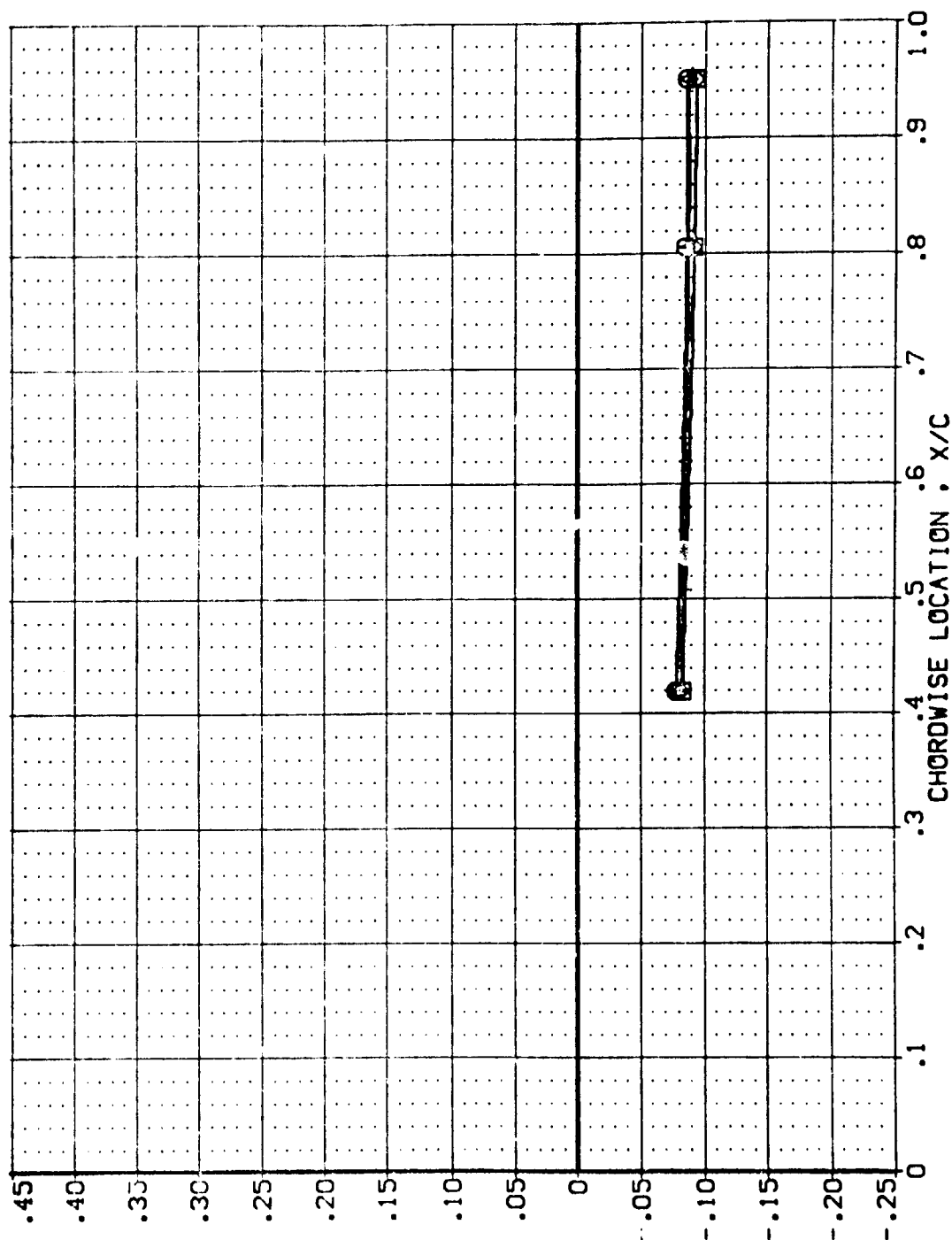
.000
3.000 23.860
3.000 23.860
3.000 23.860

SWPR

GINBAL

1.000
1.000
1.000

PRESSURE COEFFICIENT, CP



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2122) Q
(UB2125) X
(UB2126) X
(UB2127) X

AMES 87-710 IA12C 01 T1
AMES 87-710 IA12C 01 T1
AMES 87-710 IA12C 03 T1
AMES 87-710 IA12C 04 T1

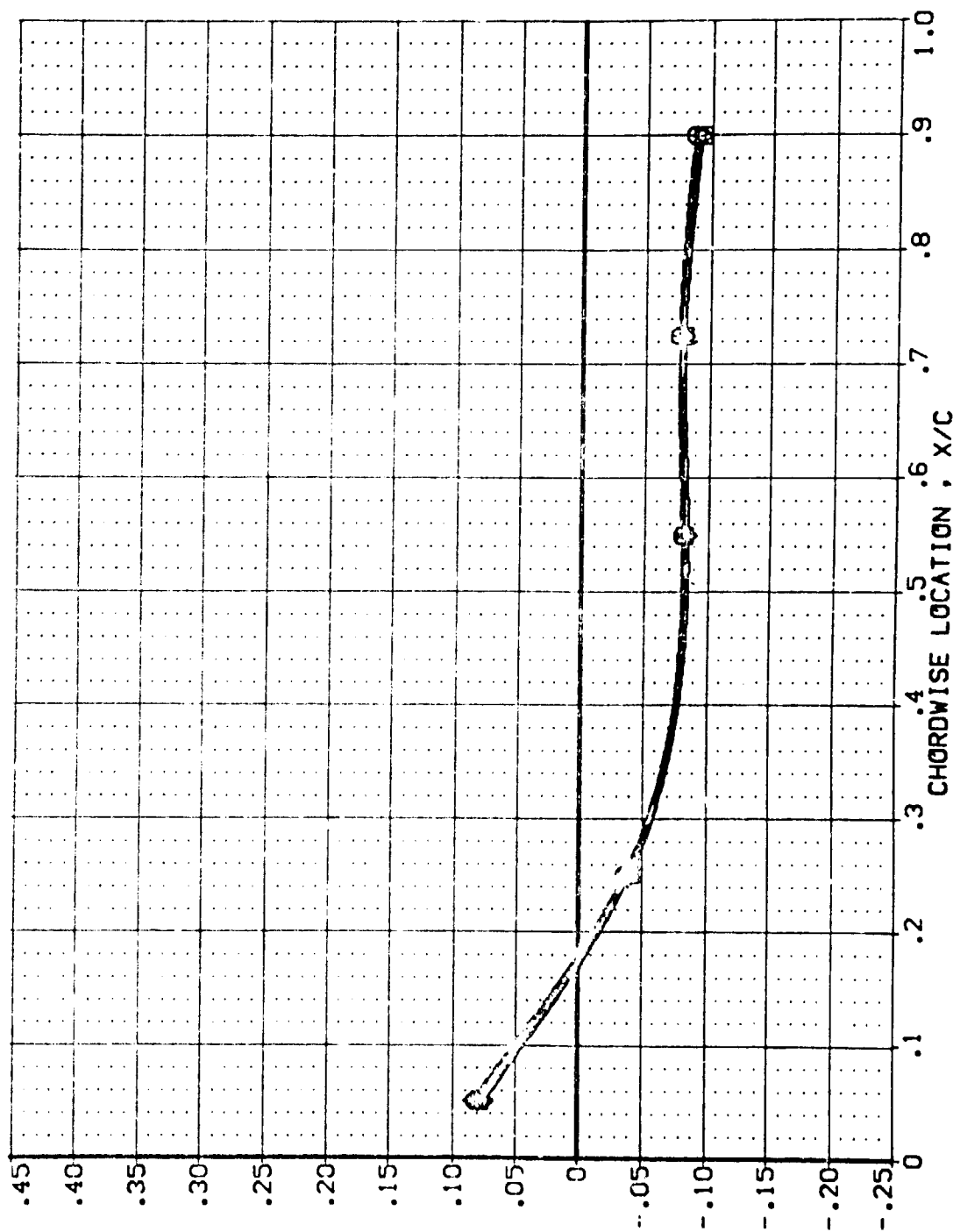
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER 1.000 23.860
3.000 23.860
3.000 23.860
3.000 23.860

SR-PR

GIMBAL





1.000
1.000
1.000
1.000



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ122) 
 (UBZ123) 
 (UBZ126) 
 (UBZ127) 

AVES 87-710 IAI2C 01 T1
 AVES 87-710 IAI2C 01 T1
 AVES 87-710 IAI2C 03 T1
 AVES 87-710 IAI2C 04 T1

UPPER WING PRESSURE
 UPPER WING PRESSURE
 UPPER WING PRESSURE
 UPPER WING PRESSURE

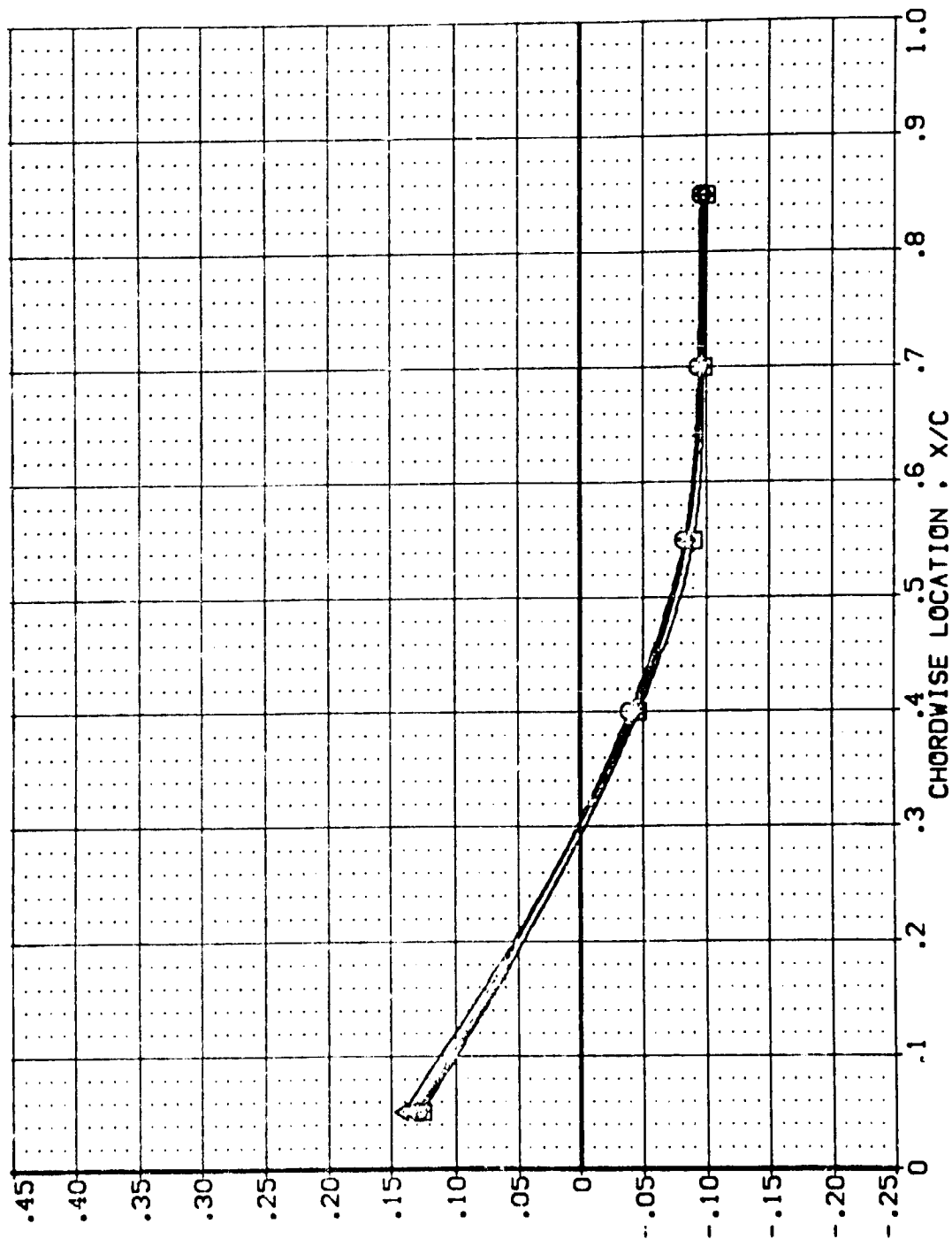
POWER 0.000 23.860
 3.000 23.860
 3.000 23.860
 3.000 23.860

SPRFR

GIMBAL

1.000
 1.000
 1.000
 1.000

PRESSURE COEFFICIENT • CP



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .673

PAGE 664

DATA SET SYMBOL

(UBZ) 22)
(UBZ) 25)
(UBZ) 26)
(UBZ) 27)

CONFIGURATION DESCRIPTION

AVES 87-710 1A12C 01 T1
AVES 87-710 1A12C 01 T1
AVES 87-710 1A12C 03 T1
AVES 87-710 1A12C 04 T1

UPPER WING PRESSURE

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER

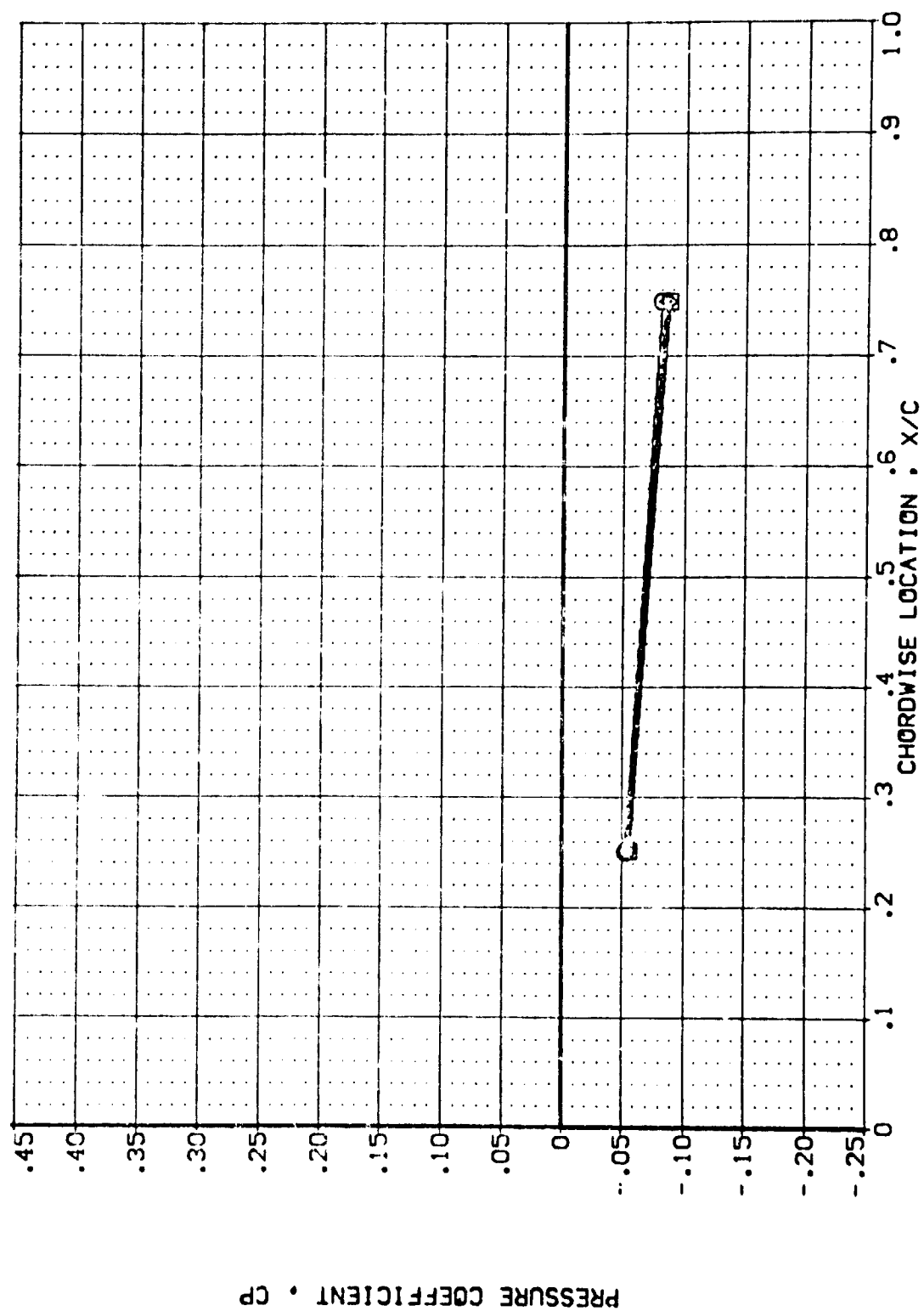
.000
3.000
3.000
3.000

SRMR

23.860
23.860
23.860
23.860

GIMBAL

1.000
1.000
1.000
1.000



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL

(UBZ122)
(UBZ125)
(UBZ126)
(UBZ127)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

CONFIGURATION DESCRIPTION

IA12C 01 T1
IA12C 01 T1
IA12C 03 T1
IA12C 04 T1

UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE
UPPER WING PRESSURE

POWER

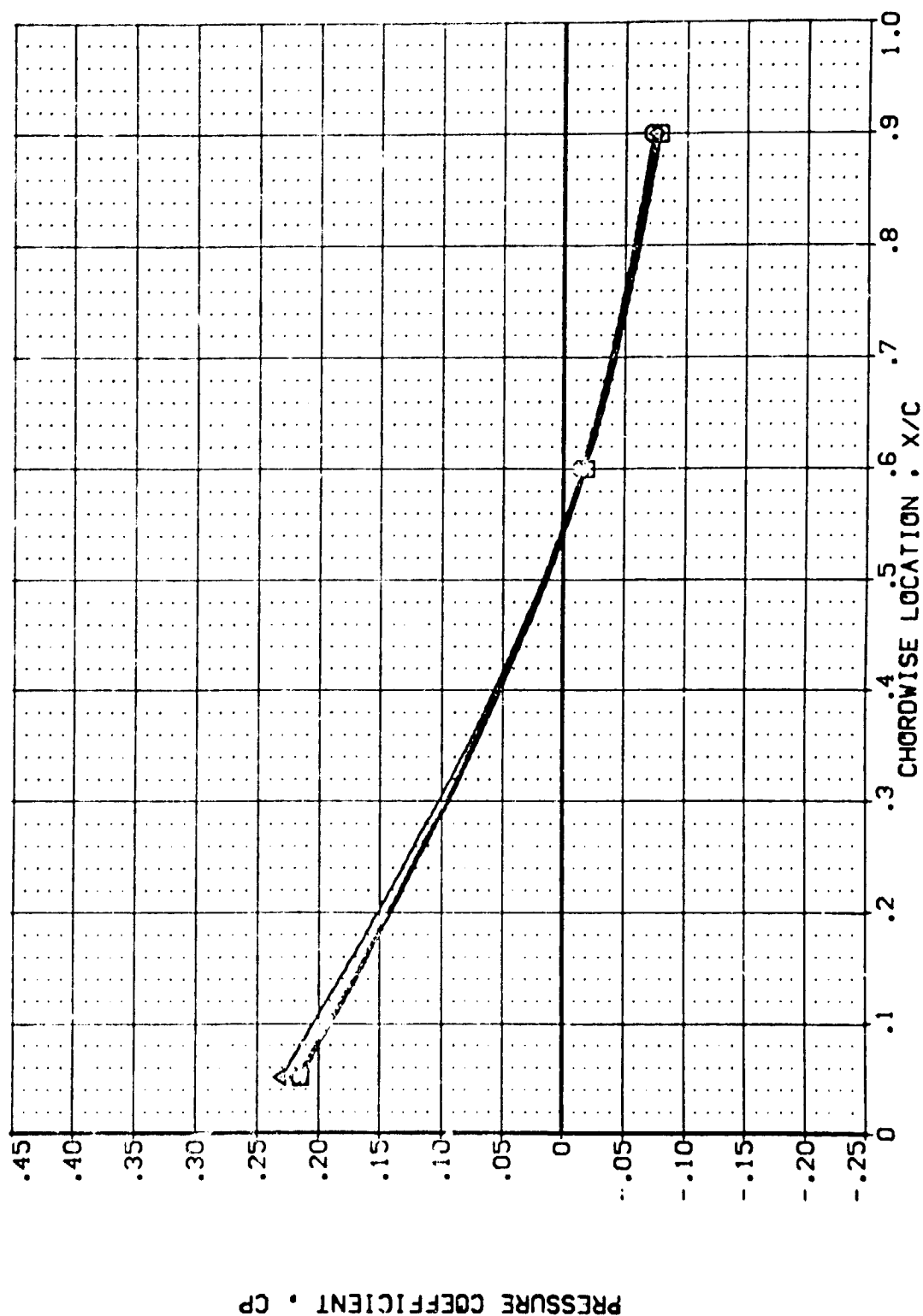
.000
3.000
3.000
3.000

SWPR

23.860
23.860
23.860
23.860

GINBAL





1.000
1.000
1.000
1.000



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTRIBUTION-WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

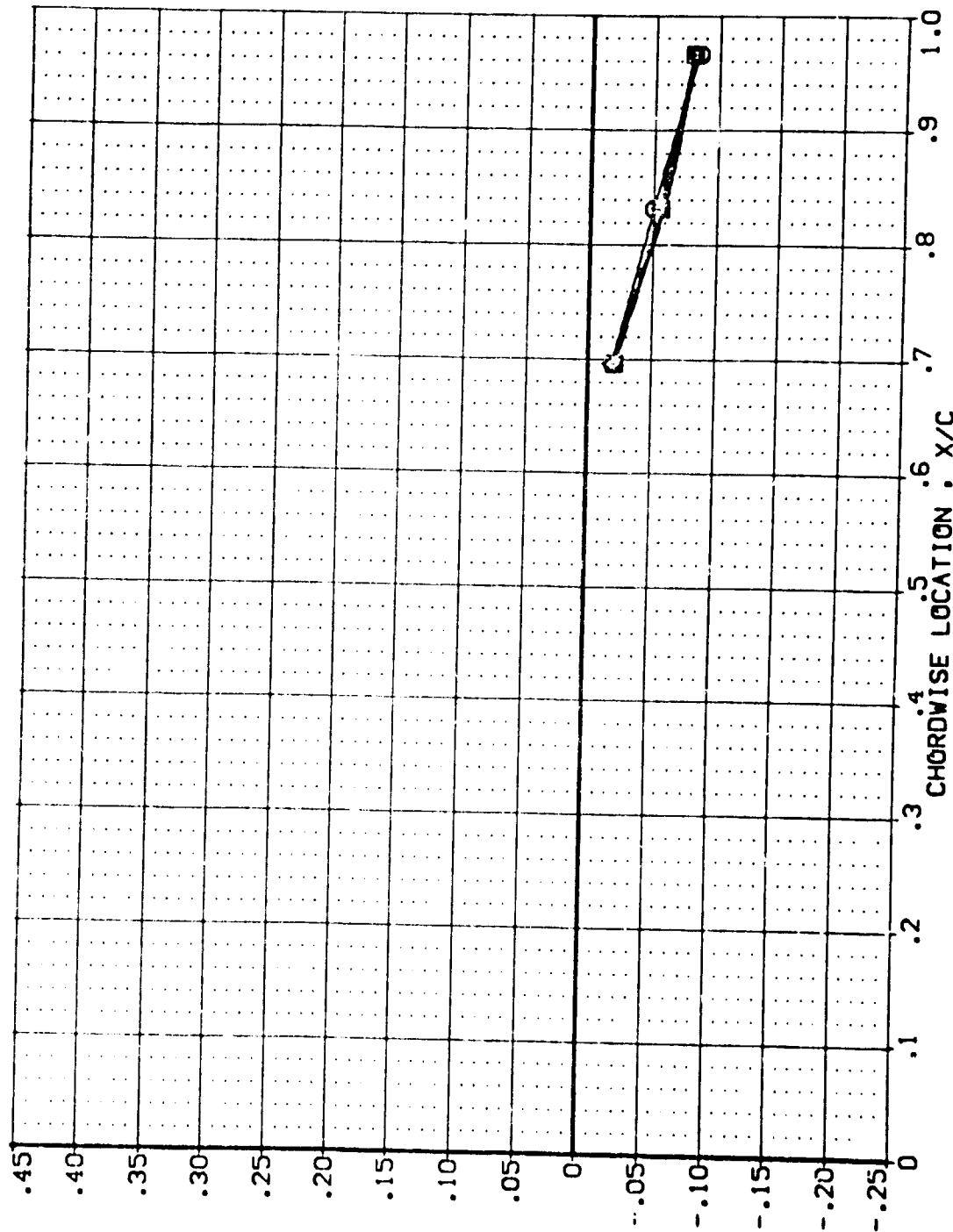
(LBZ122)  AHES 87-710 1A12C 01 T1
 (LBZ125)  AHES 87-710 1A12C 01 T1
 (LBZ126)  AHES 87-710 1A12C 03 T1
 (LBZ127)  AHES 87-710 1A12C 04 T1

LOWER WING PRESSURE
 LOWER WING PRESSURE
 LOWER WING PRESSURE

POWER 0.000 23.860
 3.000 23.860
 3.000 23.860

SHPR 1.000
 1.000
 1.000

GIMBAL 1.000
 1.000
 1.000



PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

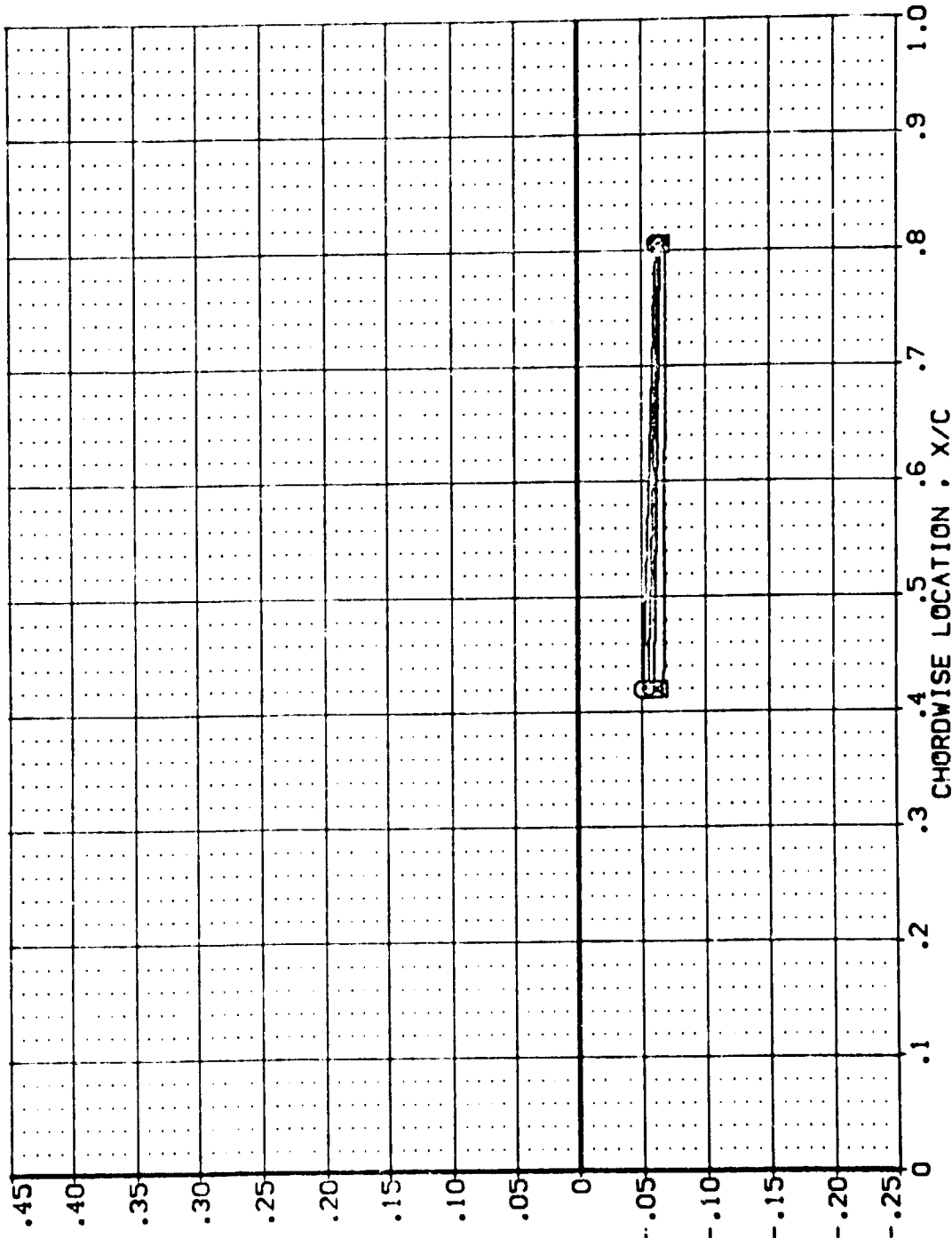
(LBZ122)
(LBZ125)
(LBZ126)
(LBZ127)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 T1
IA12C 01 T1
IA12C 03 T1
IA12C 04 T1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER C/P SR/PR GIMBAL
1.000 23.860 1.000
3.000 23.860 1.000
3.000 23.860 1.000



PRESSURE COEFFICIENT • CP

SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ122)
(LBZ125)
(LBZ126)
(LBZ127)

AVES 87-710 (A)ZC 01 T
AVES 87-710 (A)ZC 01 T
AVES 87-710 (A)ZC 03 T
AVES 87-710 (A)ZC 04 T

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER

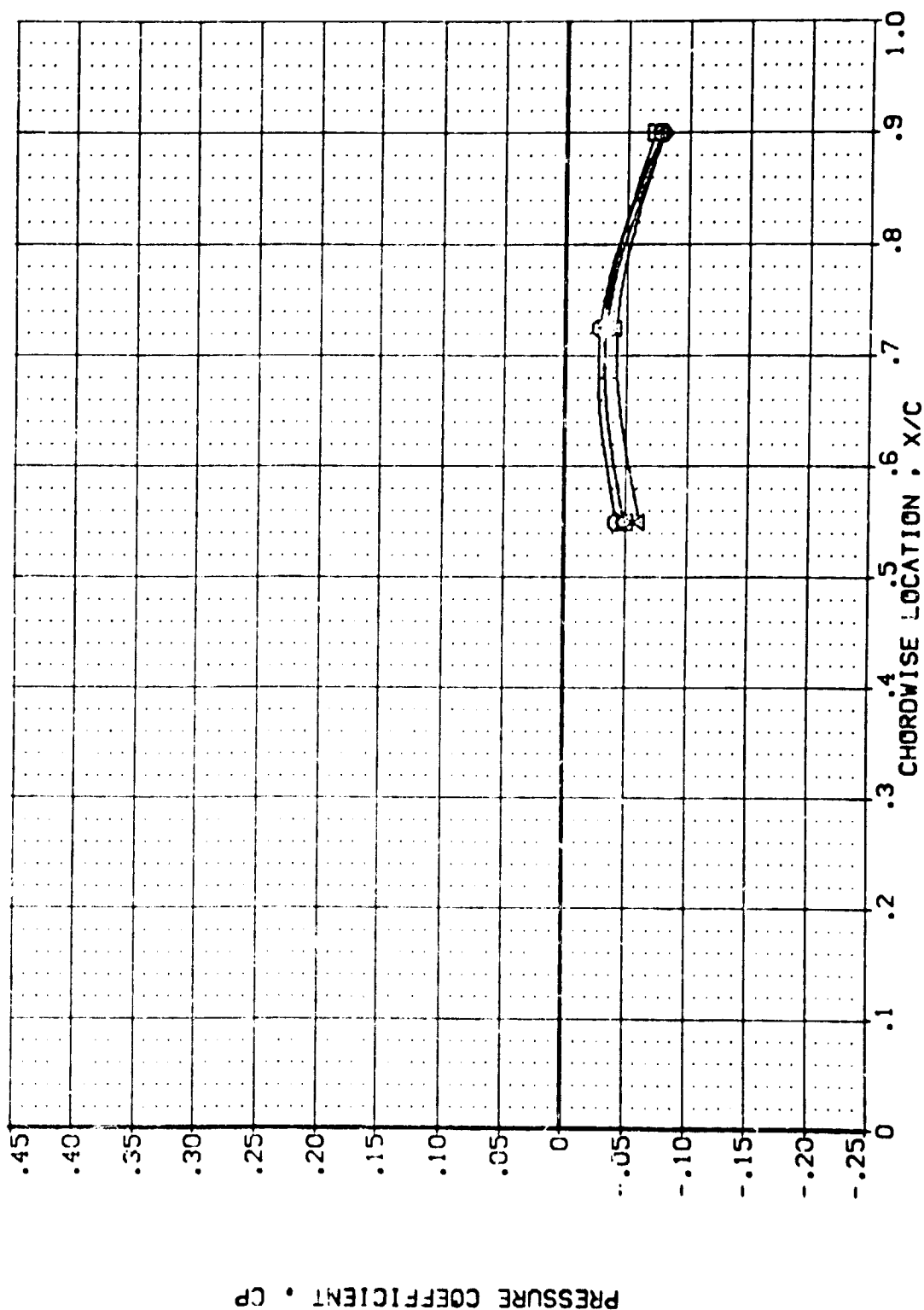
0.000
3.000
3.000
3.000

SWPR

23.860
23.860
23.860
23.860

GIMBAL

1.000
1.000
1.000
1.000



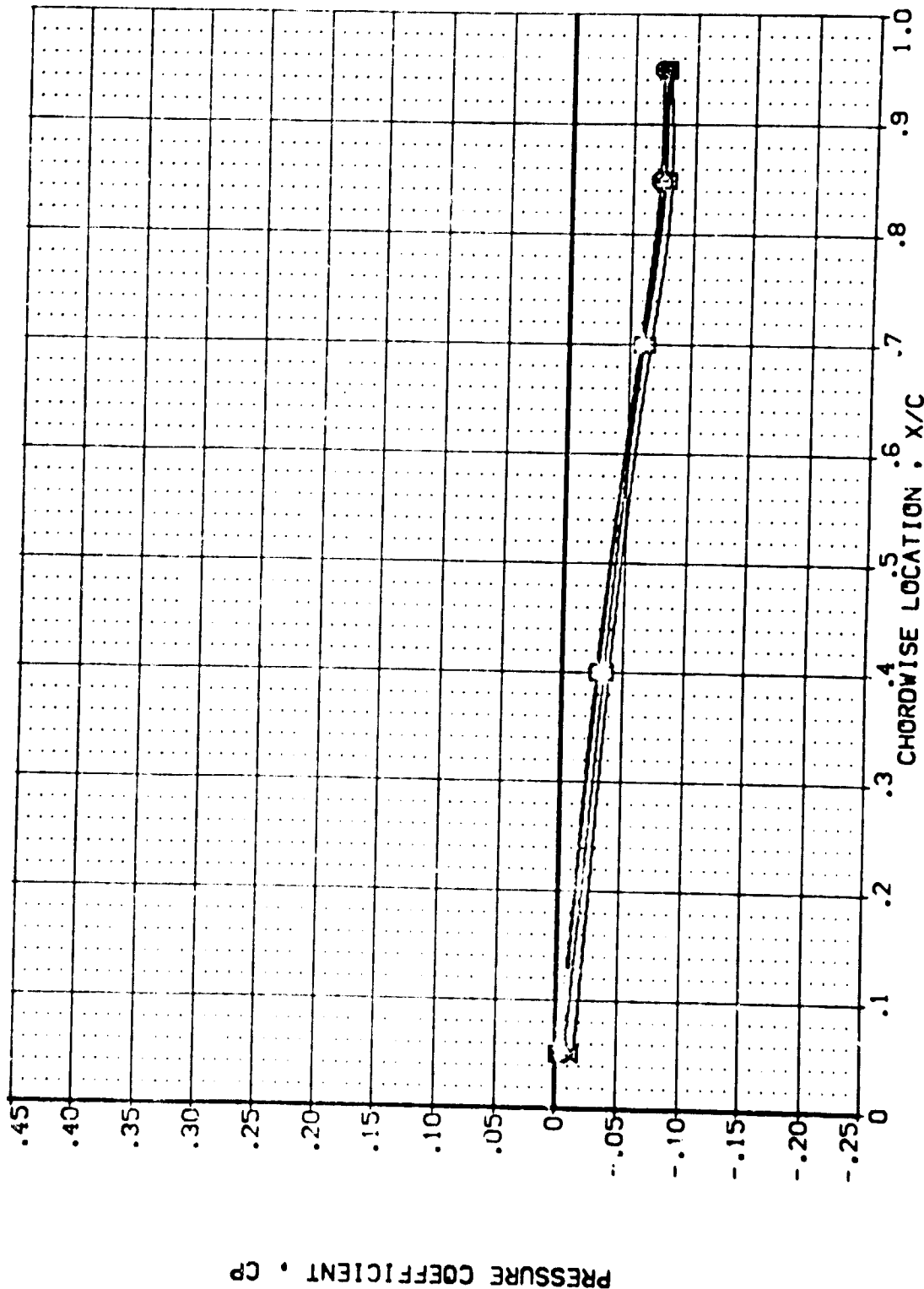
SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .534

PAGE 669

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ122)	AVES 07-710	IA12C 01 T1	LOWER WING PRESSURE	POWER	OPR	SRPR	GIMBAL
(LBZ123)	AVES 07-710	IA12C 01 T1	LOWER WING PRESSURE	3.000	23.0650		1.000
(LBZ126)	AVES 07-710	IA12C 03 T1	LOWER WING PRESSURE	3.000	23.0650		1.000
(LBZ127)	AVES 07-710	IA12C 04 T1	LOWER WING PRESSURE	3.000	23.0650		1.000



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM
MACH = 3.500 ALPHA = -8.000 Y/B = .673

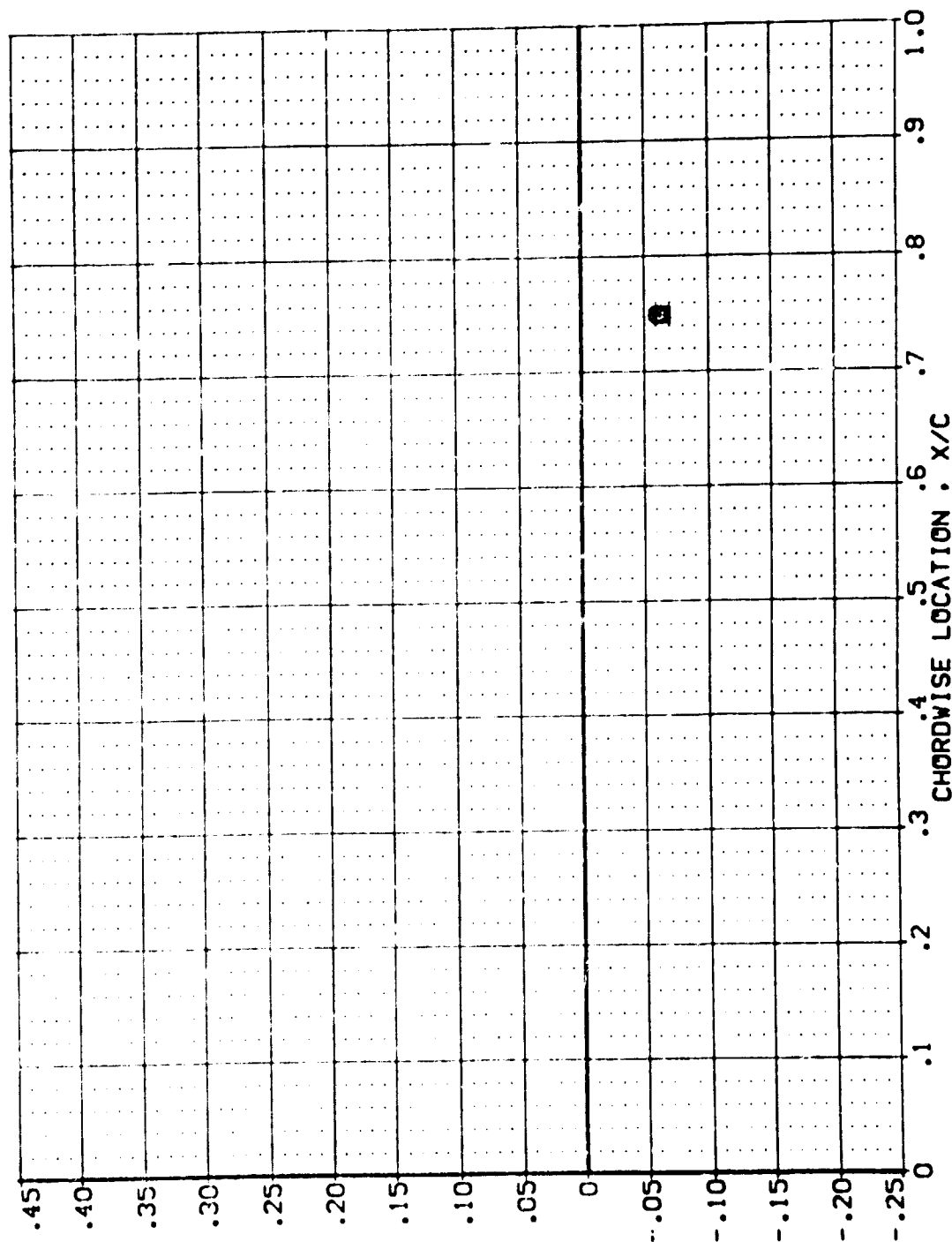
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SGPR GIMBAL

(LBZ122) AYES 87-710 1A12C 01 T1 LOWER WING PRESSURE 0.000 23.860 1.000

(LBZ123) AYES 87-710 1A12C 01 T1 LOWER WING PRESSURE 3.000 23.860 1.000

(LBZ124) AYES 87-710 1A12C 03 T1 LOWER WING PRESSURE 3.000 23.860 1.000

(LBZ127) AYES 87-710 1A12C 04 T1 LOWER WING PRESSURE 3.000 23.860 1.000



PRESSURE COEFFICIENT, CP

SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .780 PAGE 671

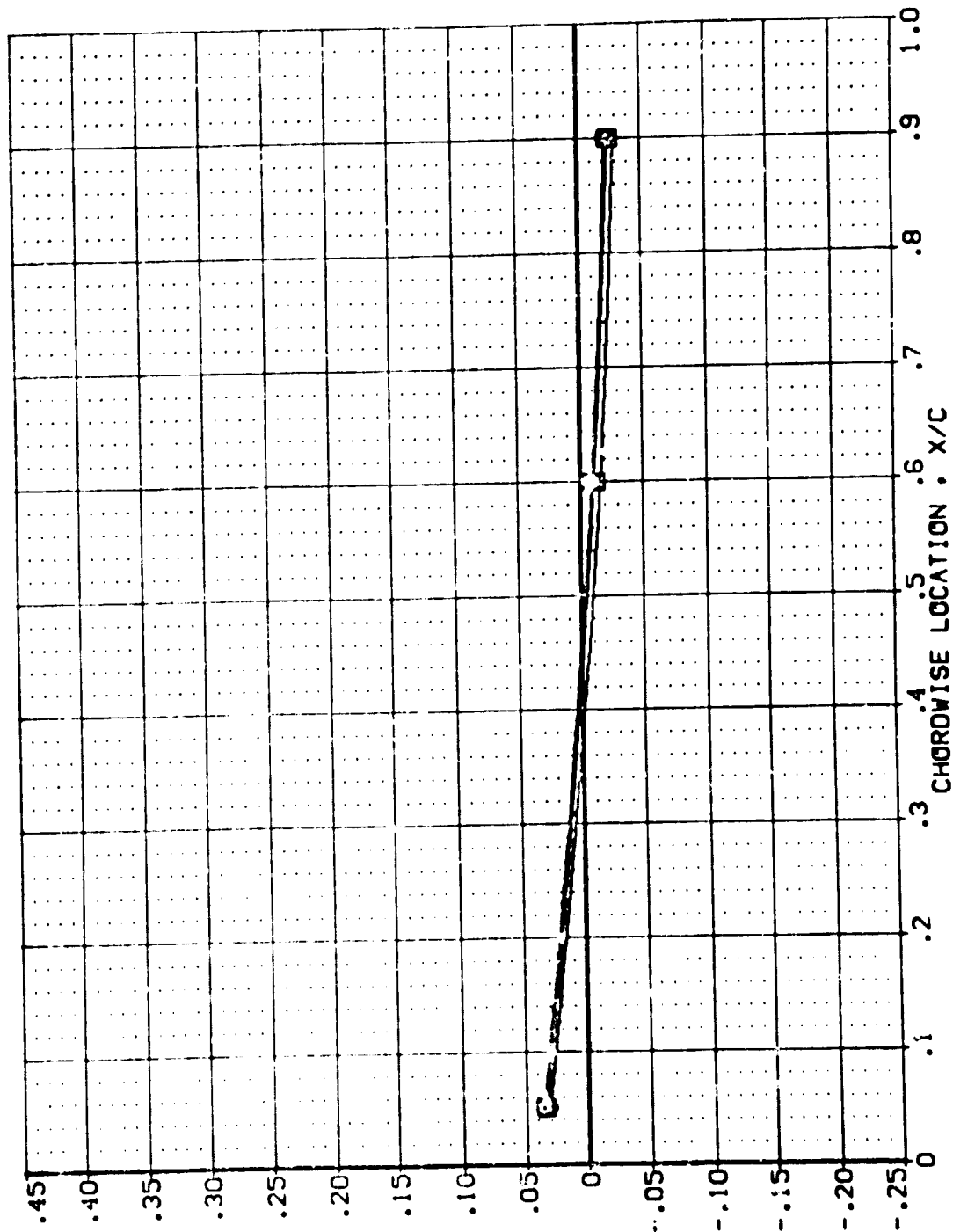
DATA SET SYMBOL CONFIGURATION DESCRIPTION LOWER WING PRESSURE POWER CRR STARR GIMBAL

(LBZ122) ASES 87-710 IAL2C 01 T1 LOWER WING PRESSURE 0.000 23.860 1.000

(LBZ125) ASES 87-710 IAL2C 01 T1 LOWER WING PRESSURE 3.000 23.860 1.000

(LBZ126) ASES 87-710 IAL2C 03 T1 LOWER WING PRESSURE 3.000 23.860 1.000

(LBZ127) ASES 87-710 IAL2C 04 T1 LOWER WING PRESSURE 3.000 23.860 1.000






PRESSURE COEFFICIENT, CP

SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .887 PAGE 672

C-9

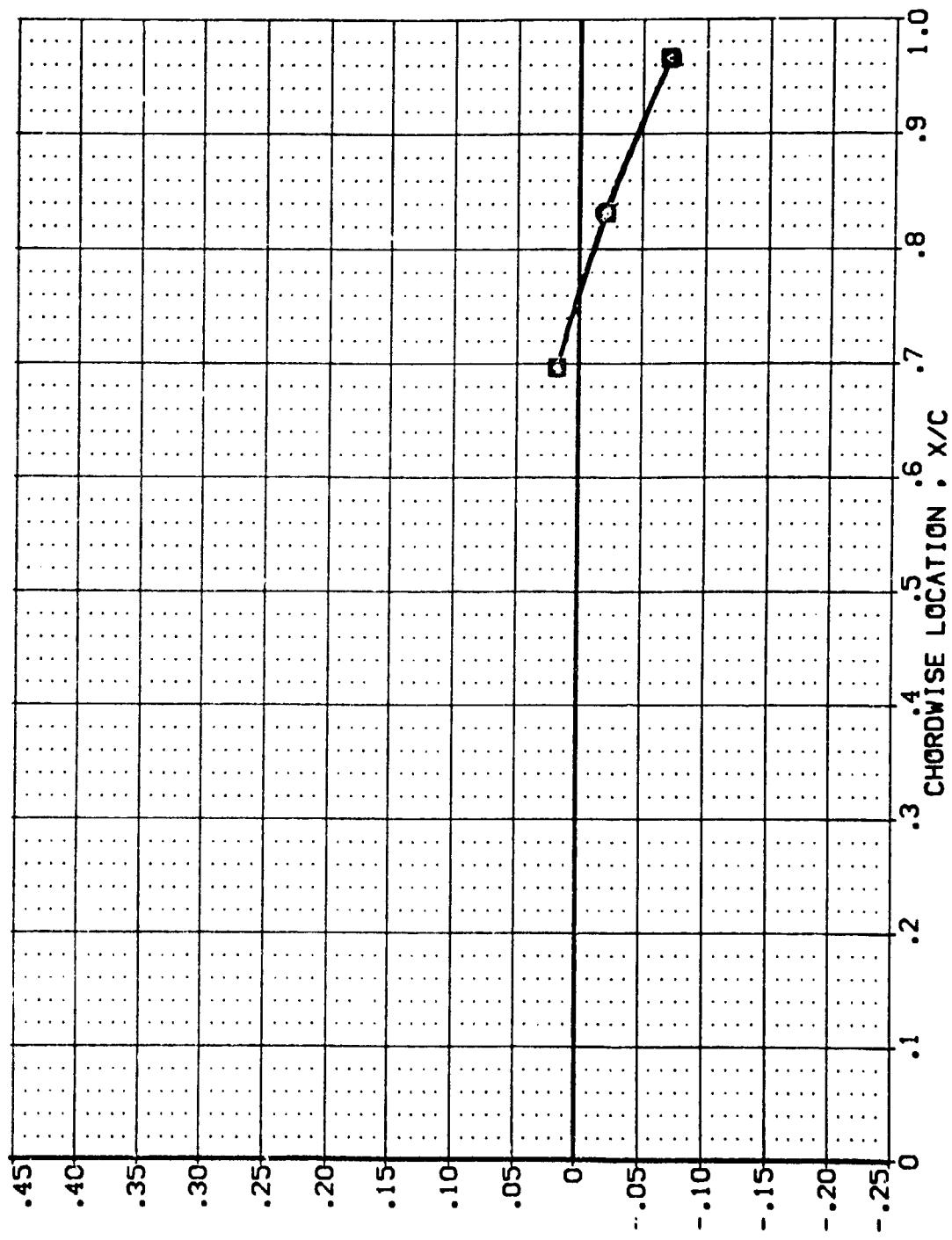
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ122) 
 (LBZ125) 
 (LBZ126) 
 (LBZ127)

AMES 87-710 (A12C 01 T)
 AMES 87-710 (A12C 01 T)
 AMES 87-710 (A12C 03 T)
 AMES 87-710 (A12C 04 T)

LOWER WING PRESSURE
 LOWER WING PRESSURE
 LOWER WING PRESSURE
 LOWER WING PRESSURE

POWER DFR SDFR GINBAL
 .000 23.860 1.000
 3.000 23.860 1.000
 3.000 23.860 1.000



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ122)
(LBZ125)
(LBZ126)
(LBZ127)

AMES 87-710
AMES 87-710
AMES 87-710
AMES 87-710

IA12C 01 T1
IA12C 01 T1
IA12C 03 T1
IA12C 04 T1

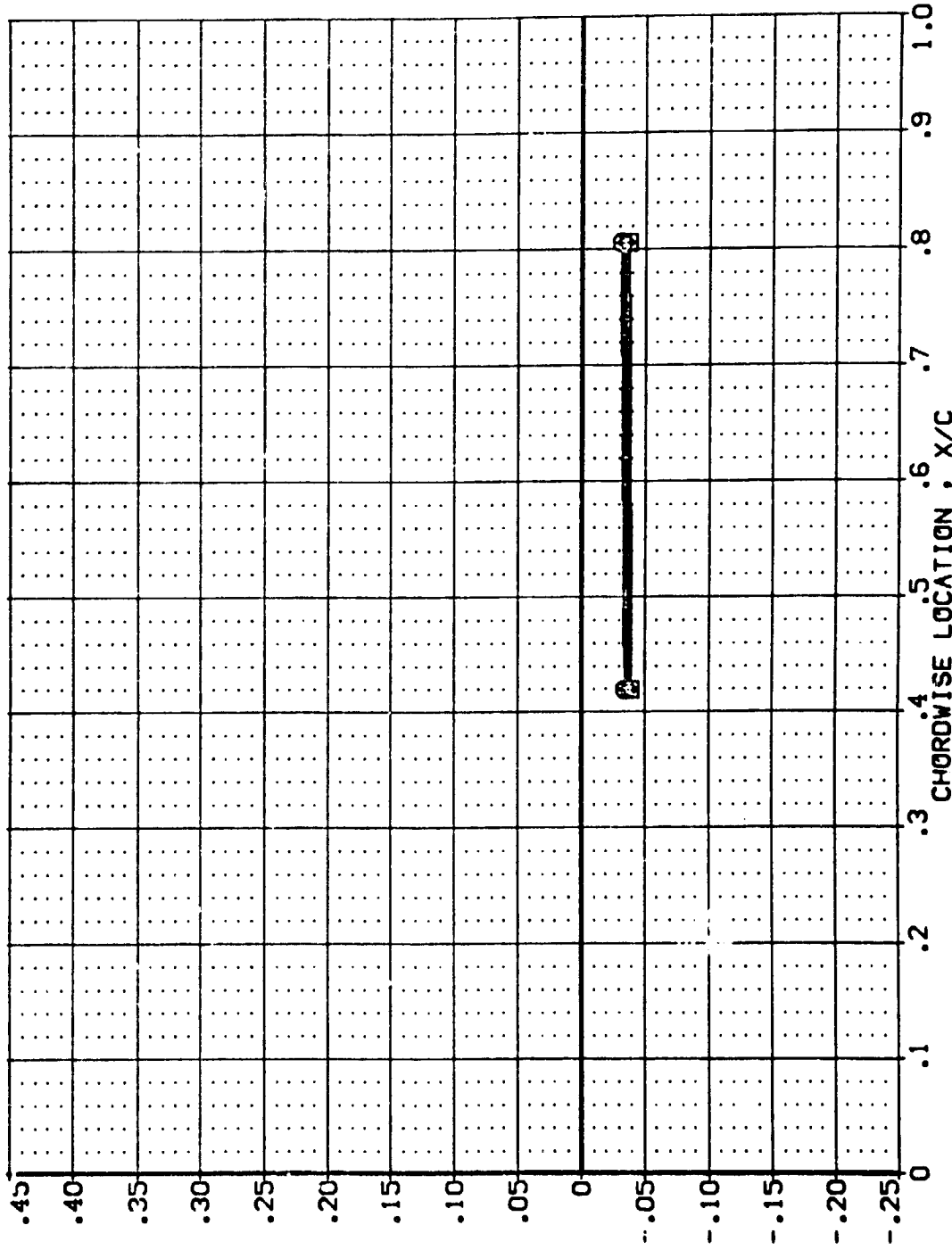
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER C/P 0.000 23.860
3.000 23.860
3.000 23.860
3.000 23.860

SR-PR

GIMBAL

1.000
1.000
1.000
1.000



PRESSURE COEFFICIENT, CP

SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .427

PAGE 674

DATA SET SYMBOL: (LBZ122) (LBZ123) (LBZ126) (LBZ127)

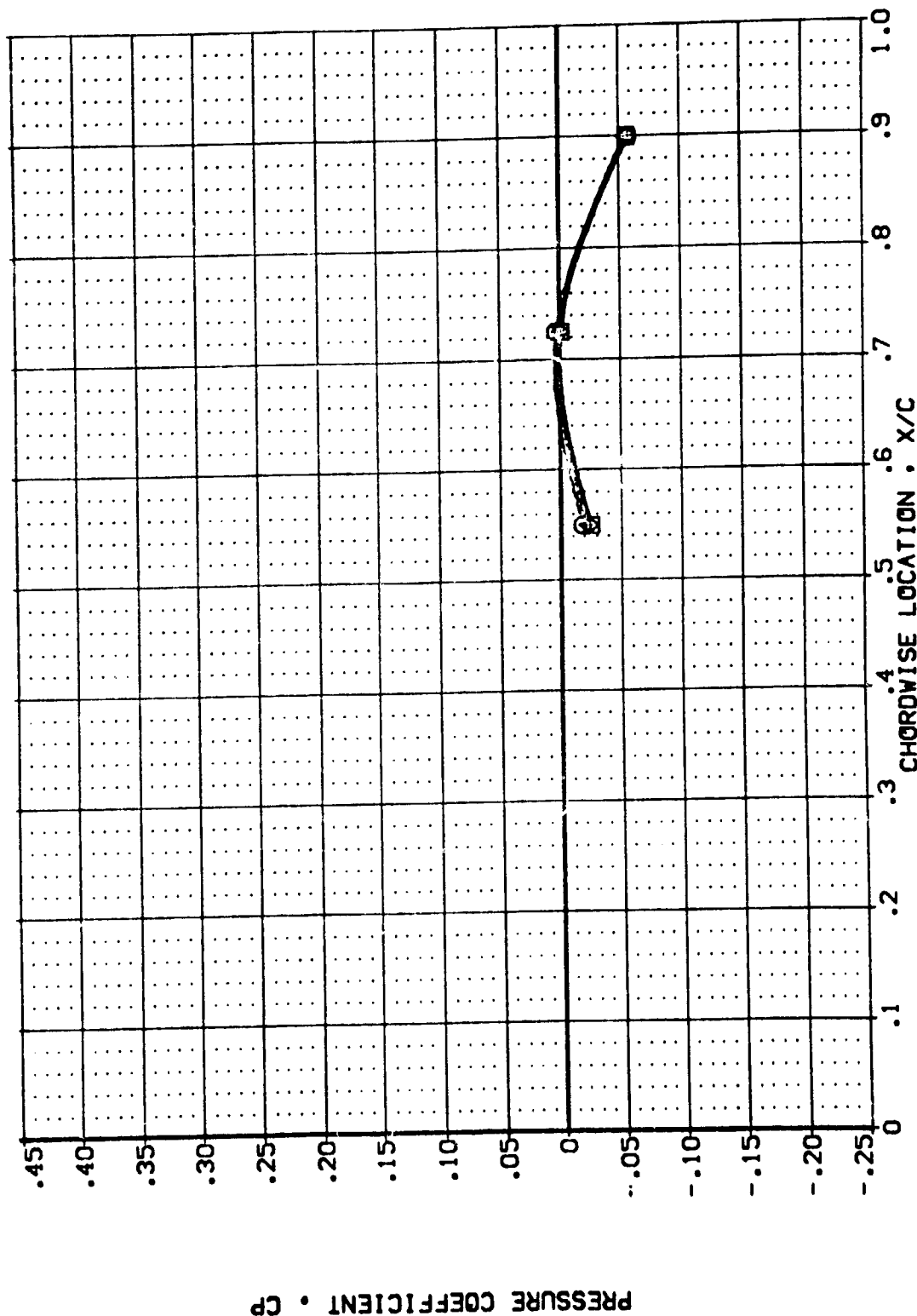
CONFIGURATION DESCRIPTION: AVES 87-710 IA12C 01 T1
 AVES 87-710 IA12C 01 T1
 AVES 87-710 IA12C 03 T1
 AVES 87-710 IA12C 04 T1

LOWER WING PRESSURE: 0.000 23.650
 LOWER WING PRESSURE: 3.000 23.630
 LOWER WING PRESSURE: 3.000 23.660

POWER: 0.000 23.650
 3.000 23.630
 3.000 23.660

SRPR: 1.000 1.000 1.000

GIMBAL: 1.000 1.000 1.000



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .534

PAGE 675

DATA SET SYMBOL CONFIGURATION DESCRIPTION LOWER WING PRESSURE POWER DFR SFRPR GIMBAL

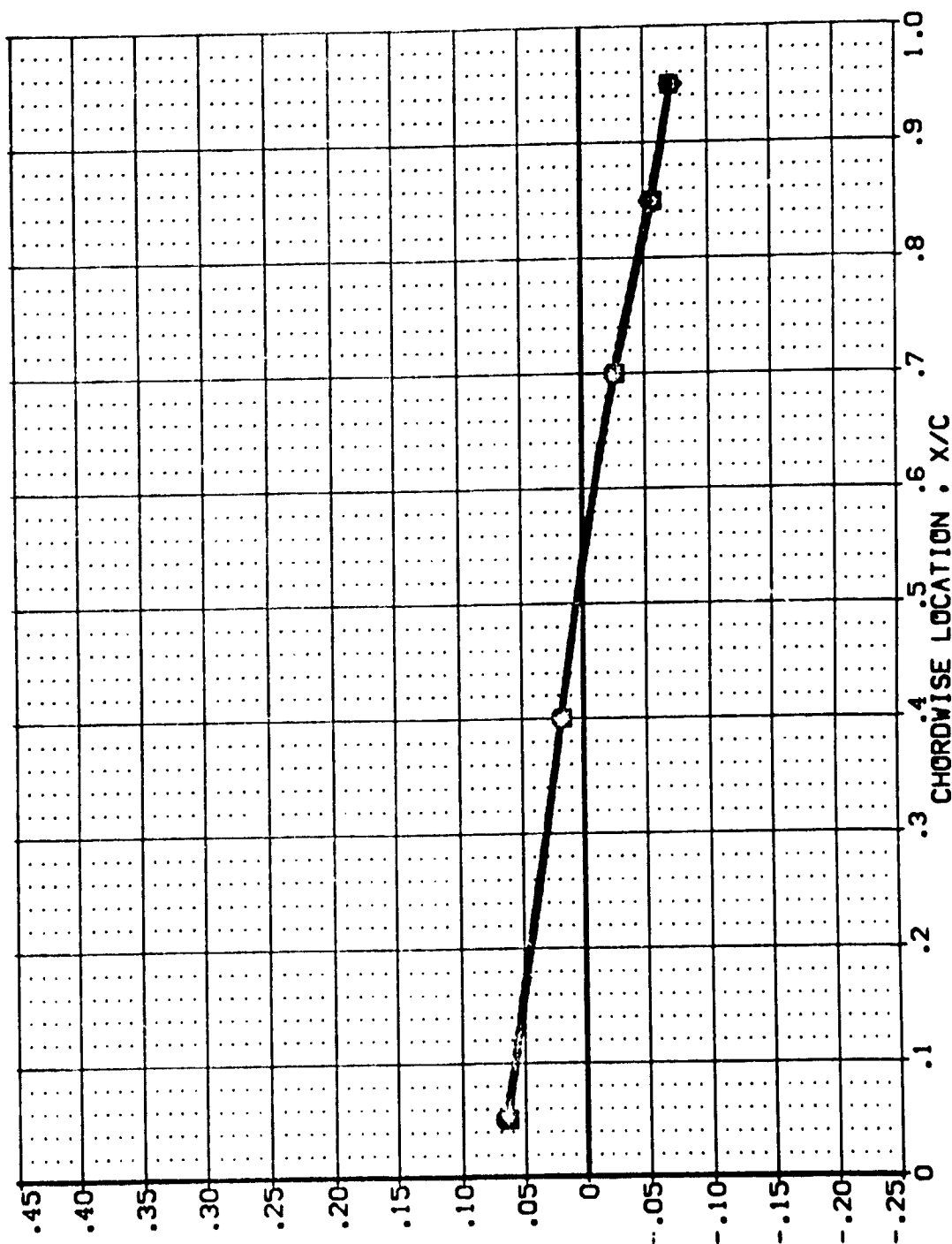
(LBZ122) AMES 87-710 IAI2C 01 T1 .000 .000 1.000

(LBZ123) AMES 87-710 IAI2C 01 T1 3.000 23.860 1.000

(LBZ126) AMES 87-710 IAI2C 03 T1 3.000 23.860 1.000

(LBZ127) AMES 87-710 IAI2C 04 T1 3.000 23.860 1.000

PRESSURE COEFFICIENT, CP



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .673

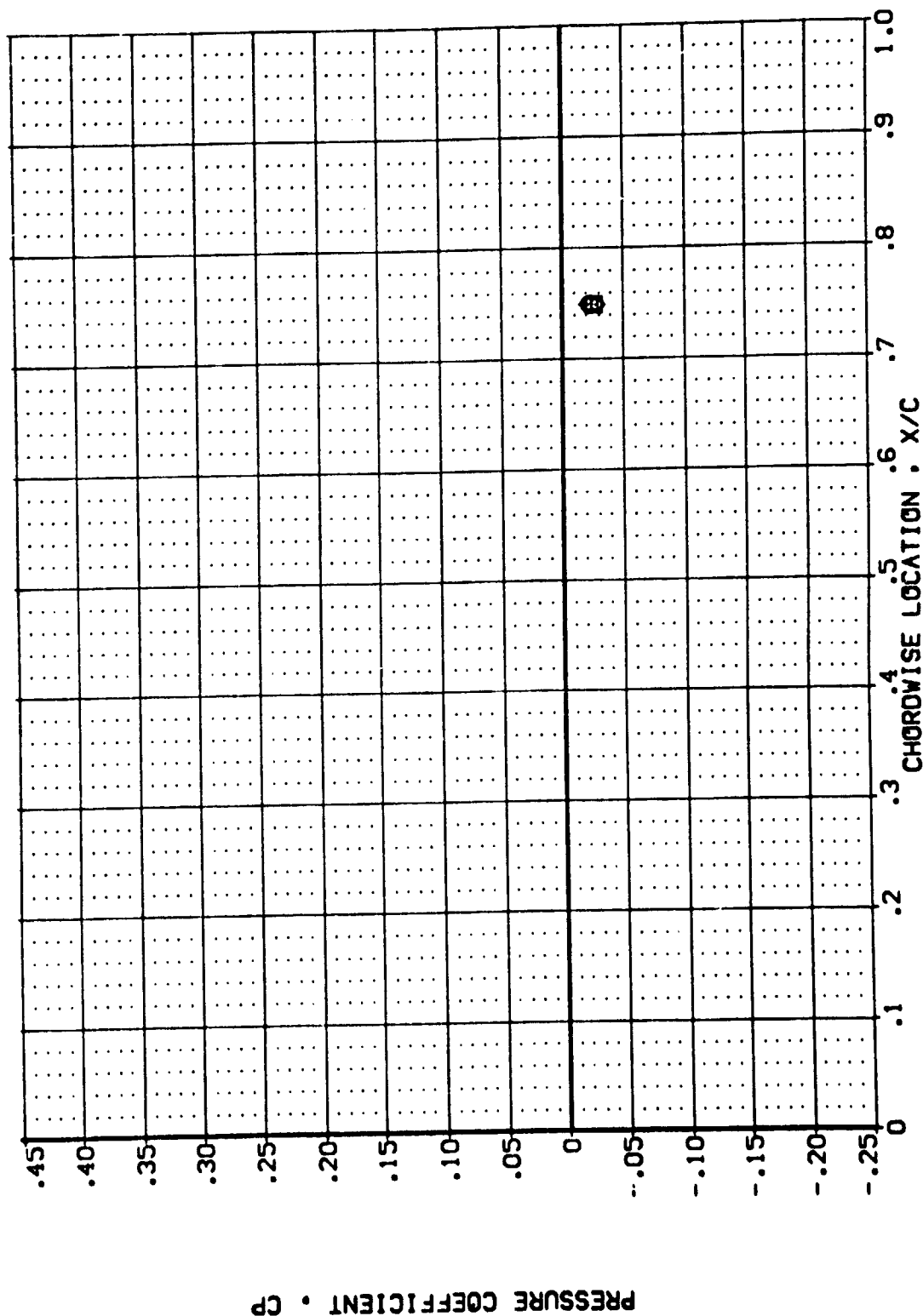
DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CDR SDRR GIMBAL

(LBZ122) ARES 87-710 IAI2C 01 T1 .000 23.860 1.000

(LBZ125) ARES 87-710 IAI2C 01 T1 3.000 23.860 1.000

(LBZ126) ARES 87-710 IAI2C 03 T1 3.000 23.860 1.000

(LBZ127) ARES 87-710 IAI2C 04 T1 3.000 23.860 1.000



MACH = 3.500 ALPHA = .000 Y/B = .780 PAGE 677

DATA SET SYMBOL

(LBZ122)
(LBZ123)
(LBZ126)
(LBZ127)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

IA12C 01 T1
IA12C 01 T1
IA12C 03 T1
IA12C 04 T1

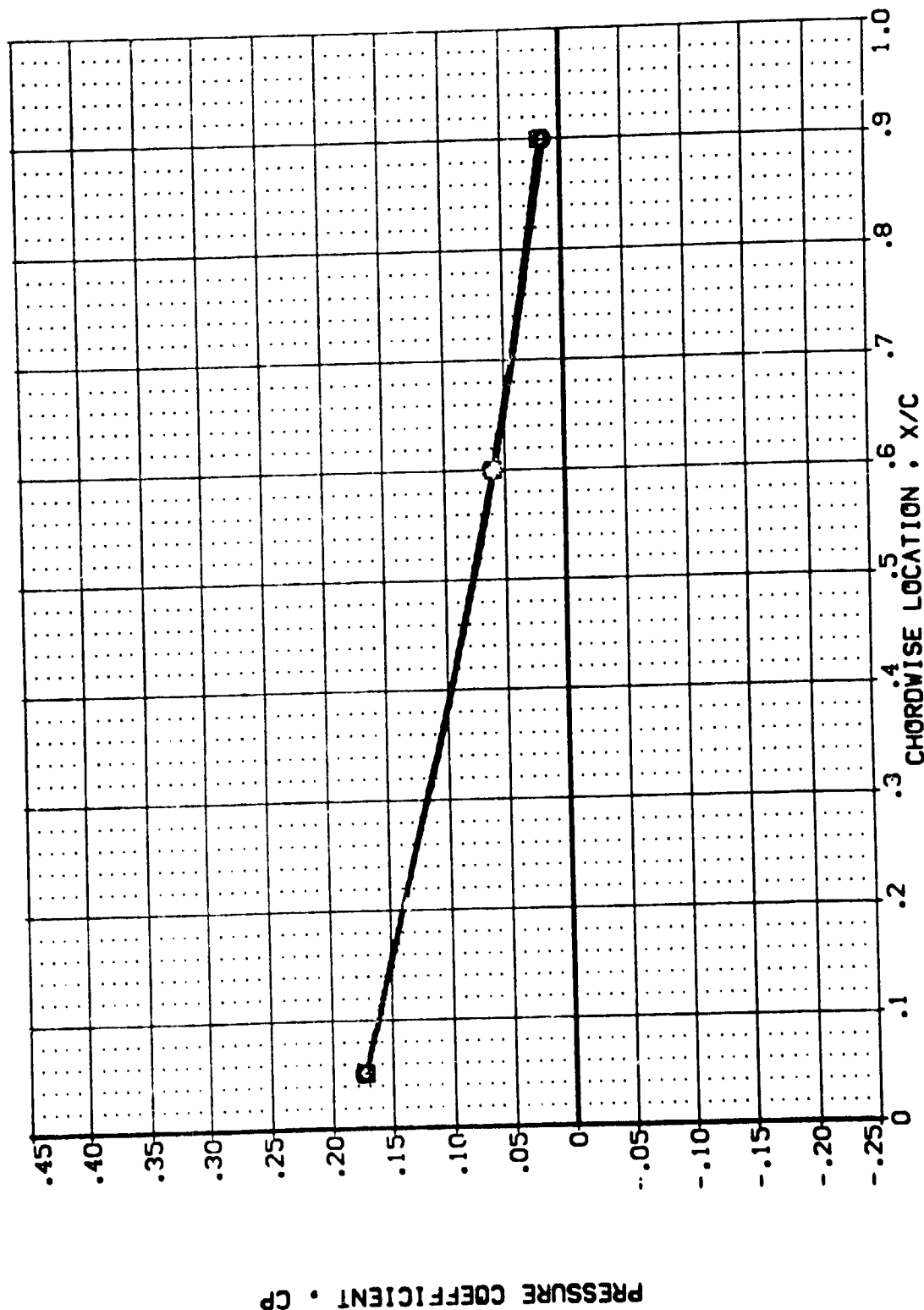
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER 0.000
3.000
3.000
3.000

CPR 23.850
23.850
23.850
23.850

SP-PR 1.000
1.000
1.000
1.000

GIMBAL 1.000
1.000
1.000
1.000



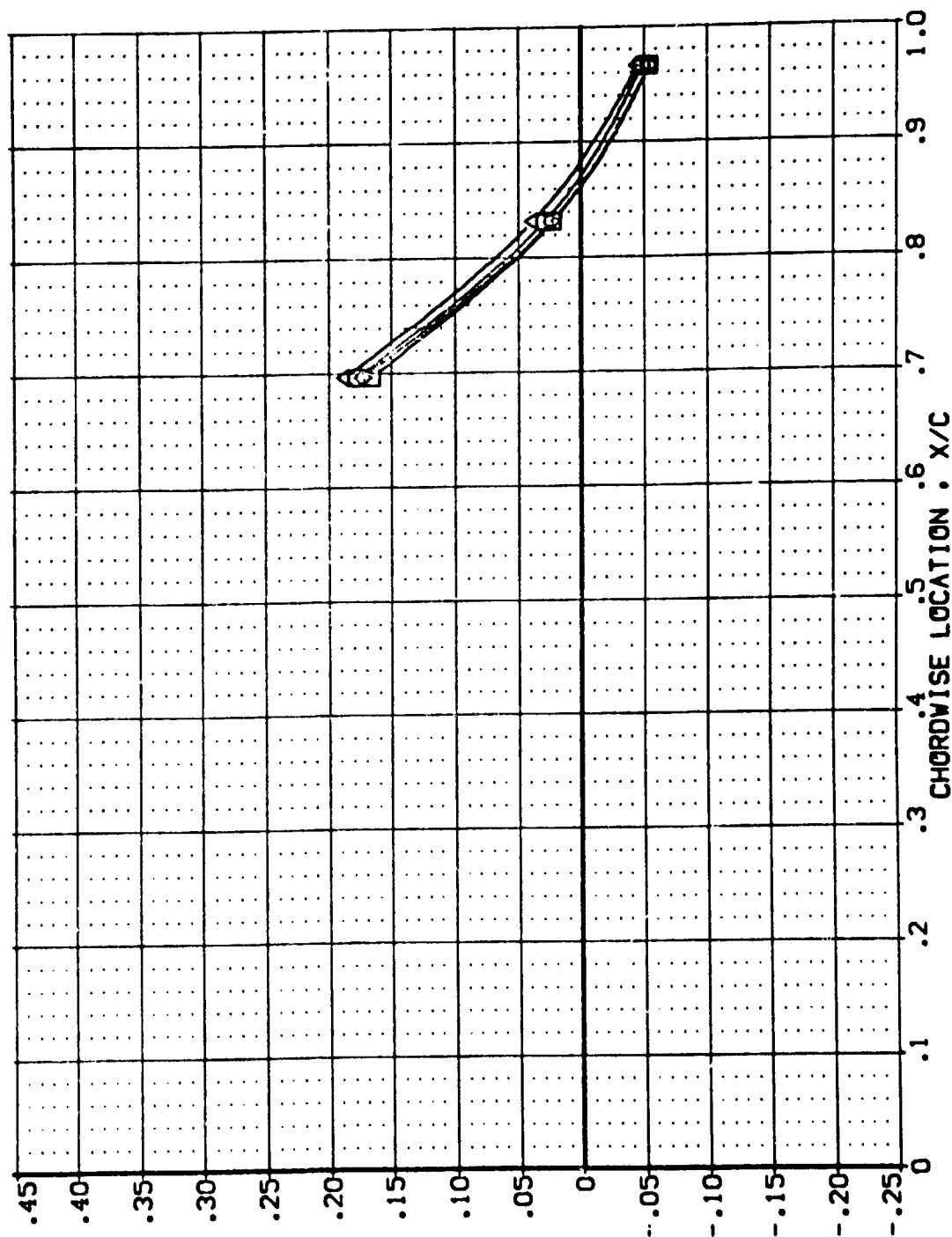
SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZ122) AMES 87-710 1A12C 01 T1
 (LBZ125) AMES 87-710 1A12C 01 T1
 (LBZ126) AMES 87-710 1A12C 03 T1
 (LBZ127) AMES 87-710 1A12C 04 T1

POWER C/PR S/PFR GIMBAL
 .000 23.860 1.000
 3.000 23.860 1.000
 3.000 23.860 1.000

LOWER WING PRESSURE
 LOWER WING PRESSURE
 LOWER WING PRESSURE



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM

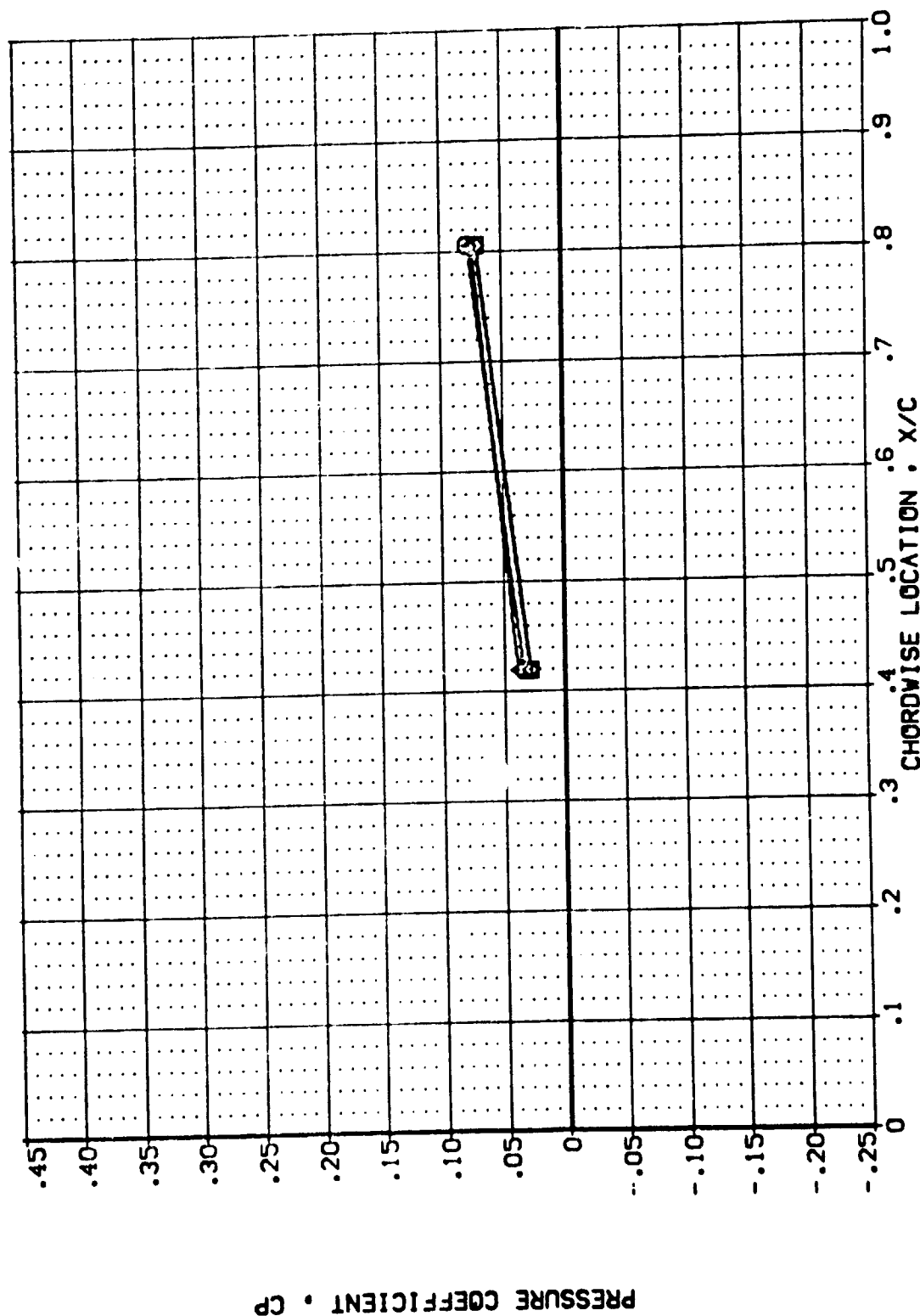
MACH = 3.500 ALPHA = 8.000 Y/B = .299

PAGE 679

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (LBZ122) AYES 87-710 1A12C 01 T1
 (LBZ123) AYES 87-710 1A12C 01 T1
 (LBZ126) AYES 87-710 1A12C 03 T1
 (LBZ127) AYES 87-710 1A12C 04 T1

POWER DFR SFRP GIMBAL
 .000 23.860 1.000
 3.000 23.860 1.000
 3.000 23.860 1.000

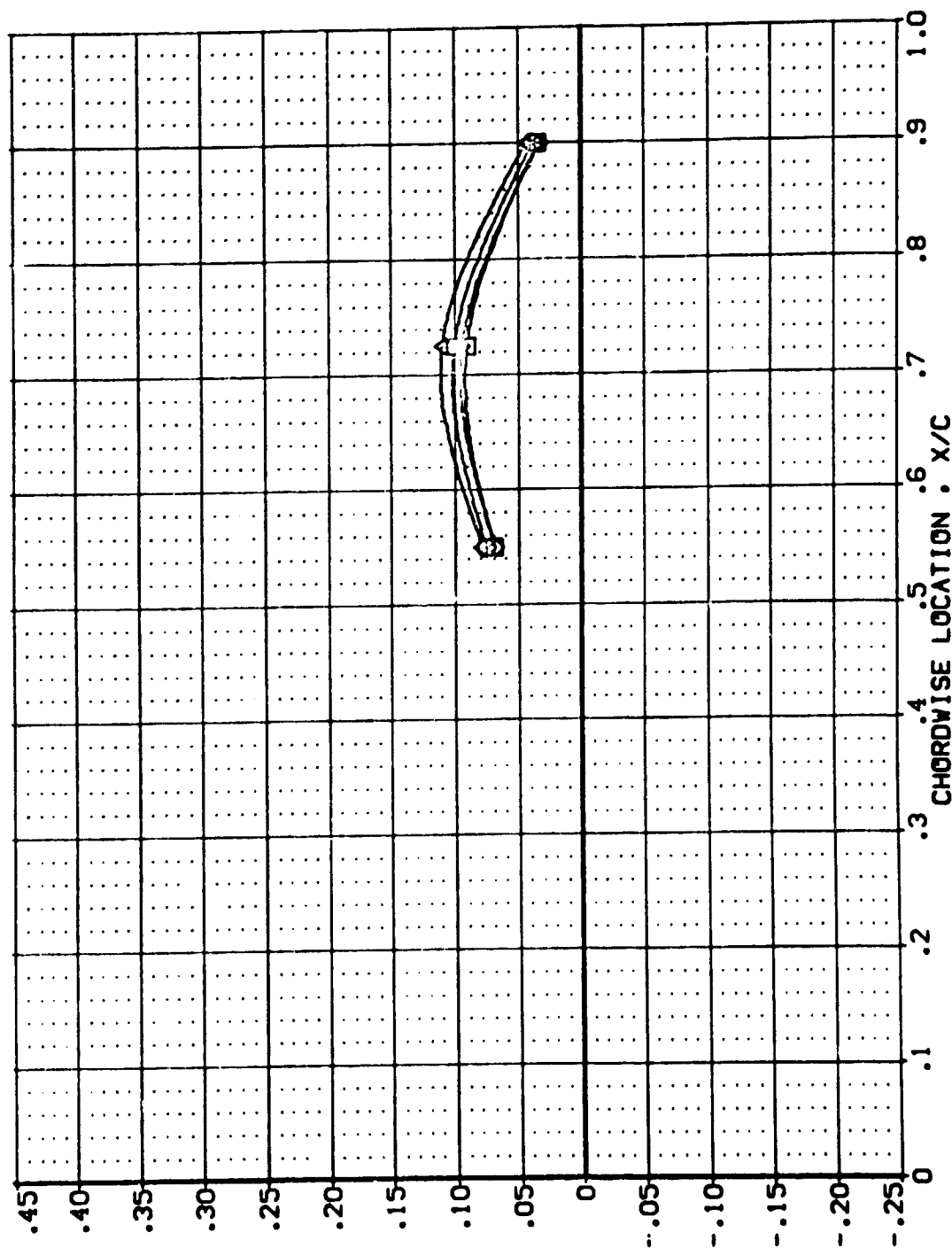
LOWER WING PRESSURE
 LOWER WING PRESSURE
 LOWER WING PRESSURE



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .427 PAGE 680

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	GPR	SNPR	GINBAL
(LBZ122)	AVES 87-710 IAI2C 01 T1	0.000	23.860		1.000
(LBZ123)	AVES 87-710 IAI2C 01 T1	3.000	23.860		1.000
(LBZ126)	AVES 87-710 IAI2C 03 T1	3.000	23.860		1.000
(LBZ127)	AVES 87-710 IAI2C 04 T1	3.000	23.860		1.000



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL

(LBZ122)
(LBZ125)
(LBZ126)
(LBZ127)

⊗

CONFIGURATION DESCRIPTION

AVES 87-710 IAI2C 01 T1
AVES 87-710 IAI2C 01 T1
AVES 87-710 IAI2C 03 T1
AVES 87-710 IAI2C 04 T1

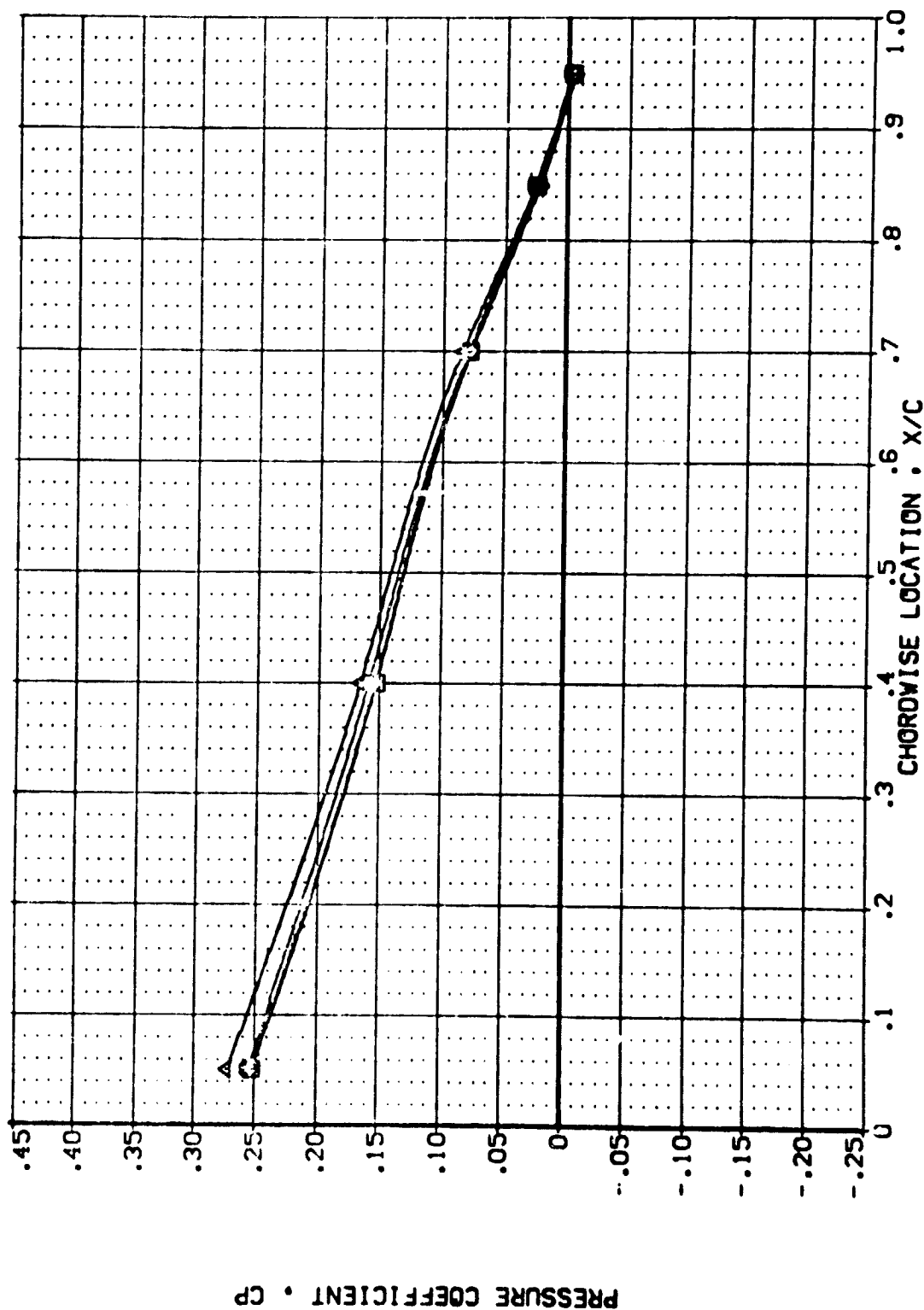
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER 0.000
3.000
3.000
3.000

QPR 23.860
23.820
23.860
23.860

SP-PR

01-MBAL
1.000
1.000
1.000



PRESSURE COEFFICIENT • CP

CHORDWISE LOCATION • X/C

SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .673

PAGE 682

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ122)
(LBZ123)
(LBZ126)
(LBZ127)

AVES 87-710 IAI2C 01 T1
AVES 87-710 IAI2C 01 T1
AVES 87-710 IAI2C 03 T1
AVES 87-710 IAI2C 04 T1

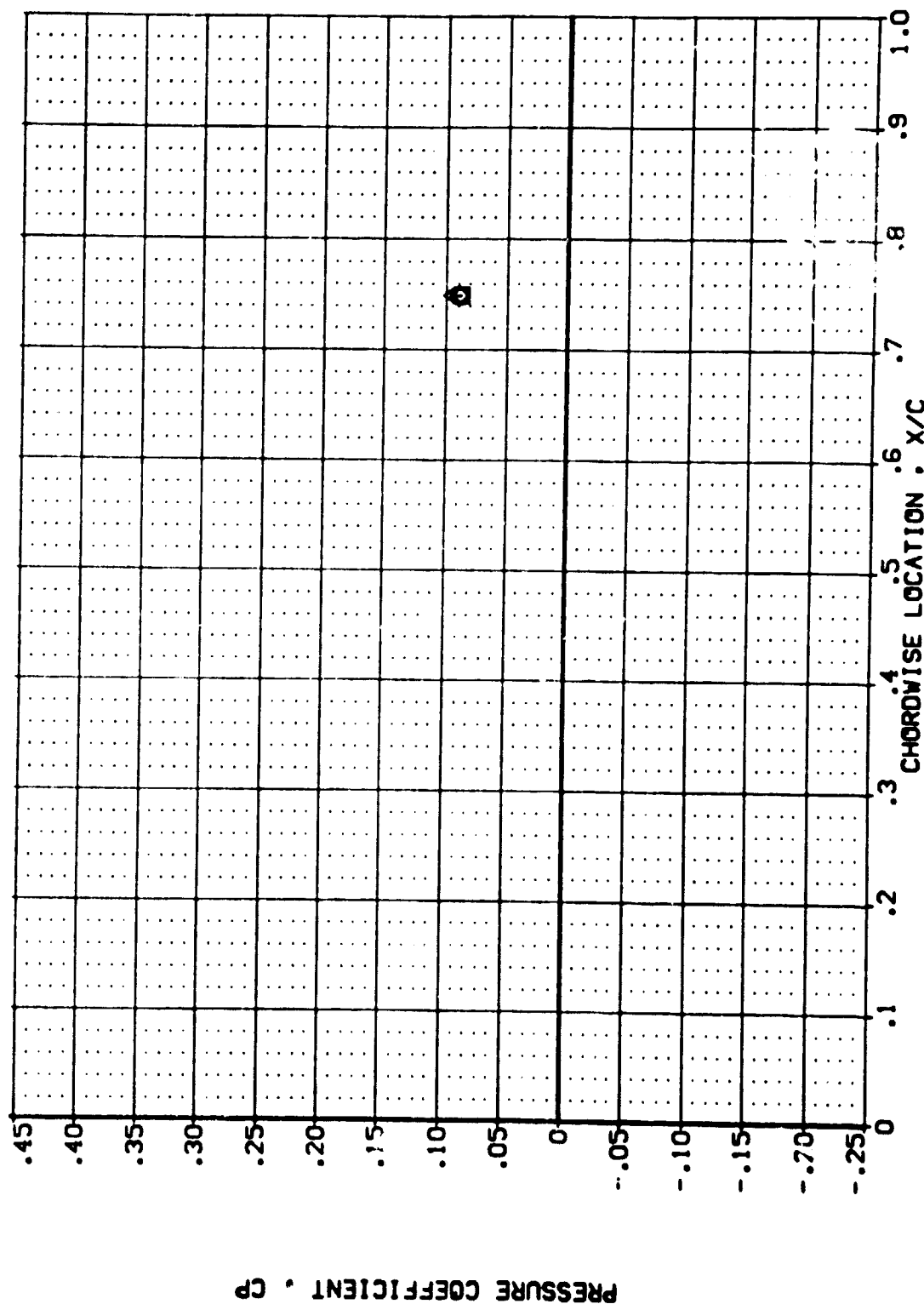
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER 0.000 23.860
3.000 23.860
3.000 23.860
3.000 23.860

SP-PR

GIMBAL

1.000
1.000
1.000
1.000



SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ122)
(LBZ125)
(LBZ126)
(LBZ127)

AVES 87-710
AVES 87-710
AVES 87-710
AVES 87-710

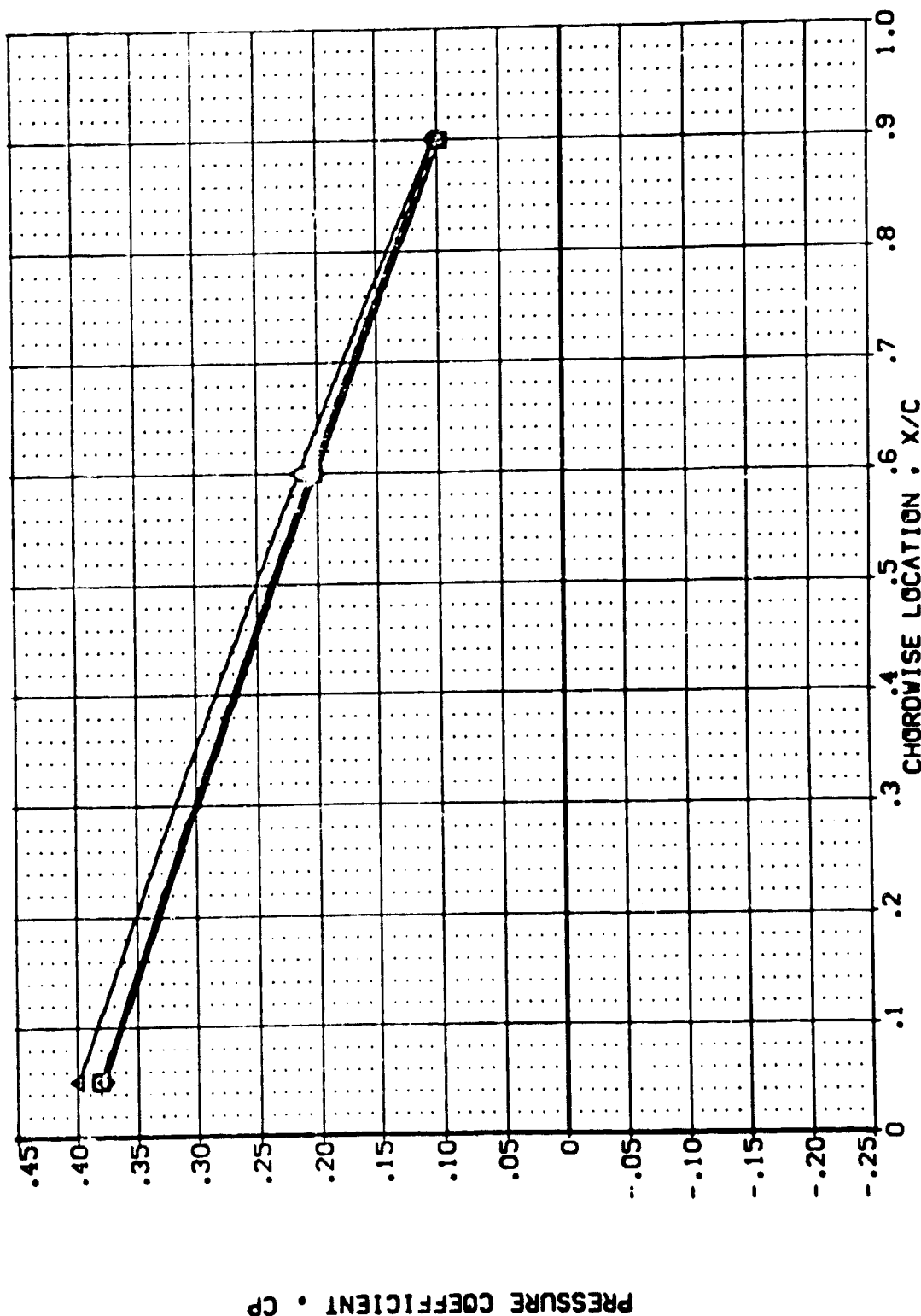
IA12C 01 T1
IA12C 01 T1
IA12C 03 T1
IA12C 04 T1

LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE
LOWER WING PRESSURE

POWER 0.000
3.000
3.000
3.000

CPR 23.860
23.860
23.860
23.860

SRPR 1.000
1.000
1.000
1.000



PRESSURE COEFFICIENT • CP

SECOND STAGE ORBITER ENGINE-OUT EFFECTS ON WING PRESSURE DISTR. - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ008)  AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

(UBZ041)  AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE

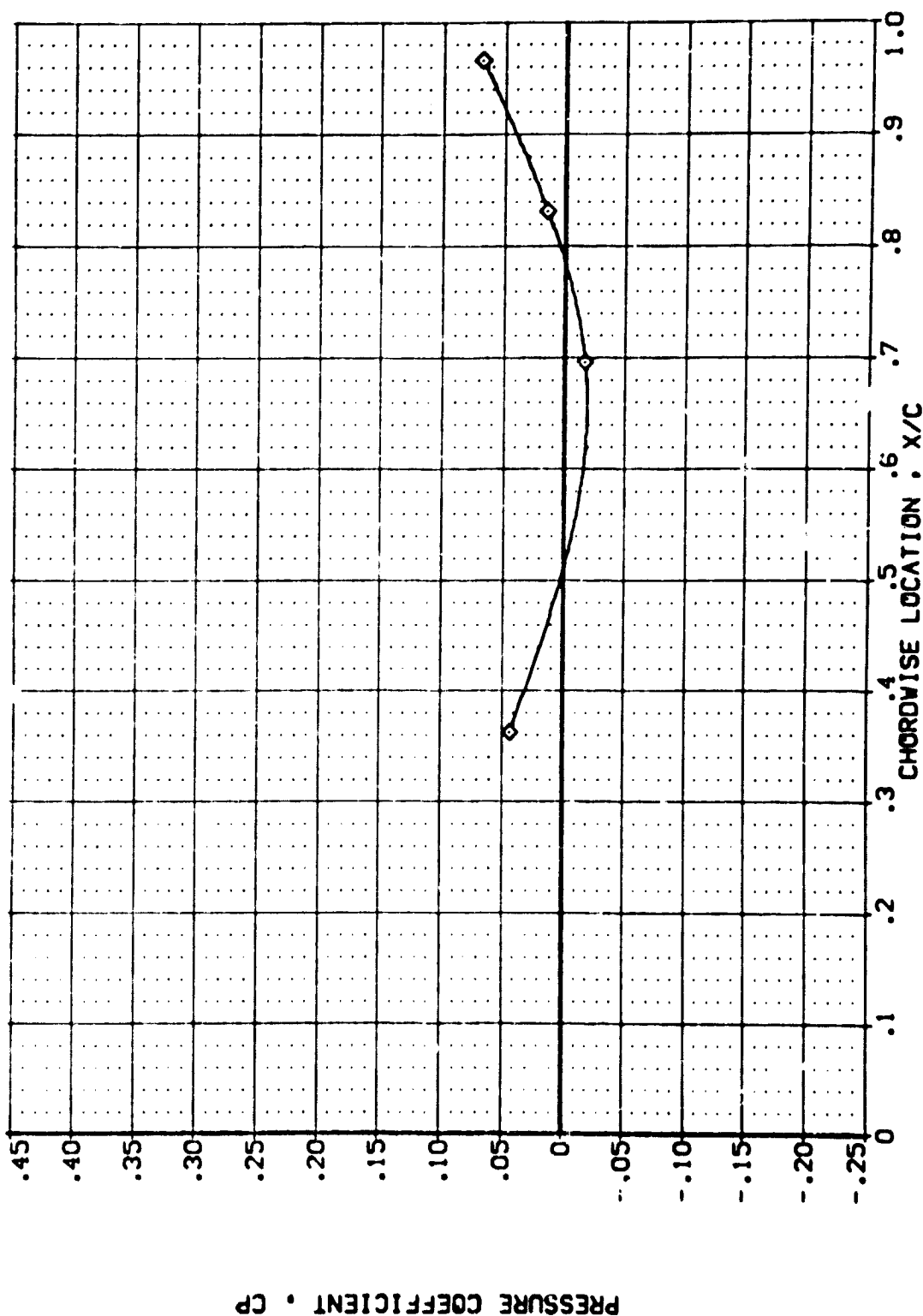
(UBZ128)  AMES 87-710 IAI2C 01 T1 S1 M-3.5 PLANS UP VAG PDS

POWER 0.000
0.000
1.000
1.000
1.000

SWPR .758

OPR 26.860

GINBAL 1.000
1.000
1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

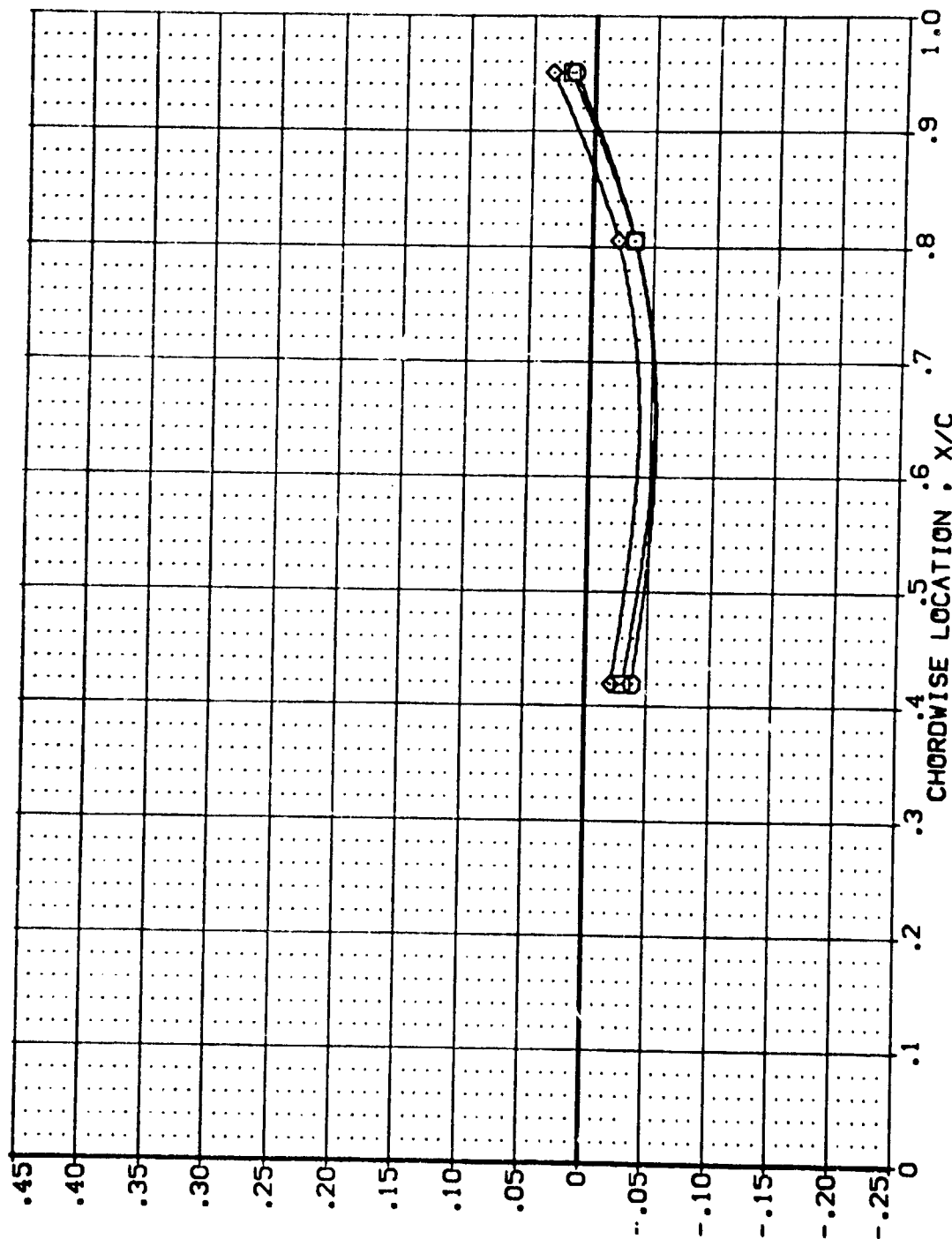
MACH = 3.000 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL

(UB2038)
(UB2041)
(UB2128)

AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 H-315 PLUS UP WING PHS

POWER DPR SPPR GIMBAL
.000 26.660 .768
1.000 1.000 1.000



PRESSURE COEFFICIENT, CP

CHORDWISE LOCATION, X/C

EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

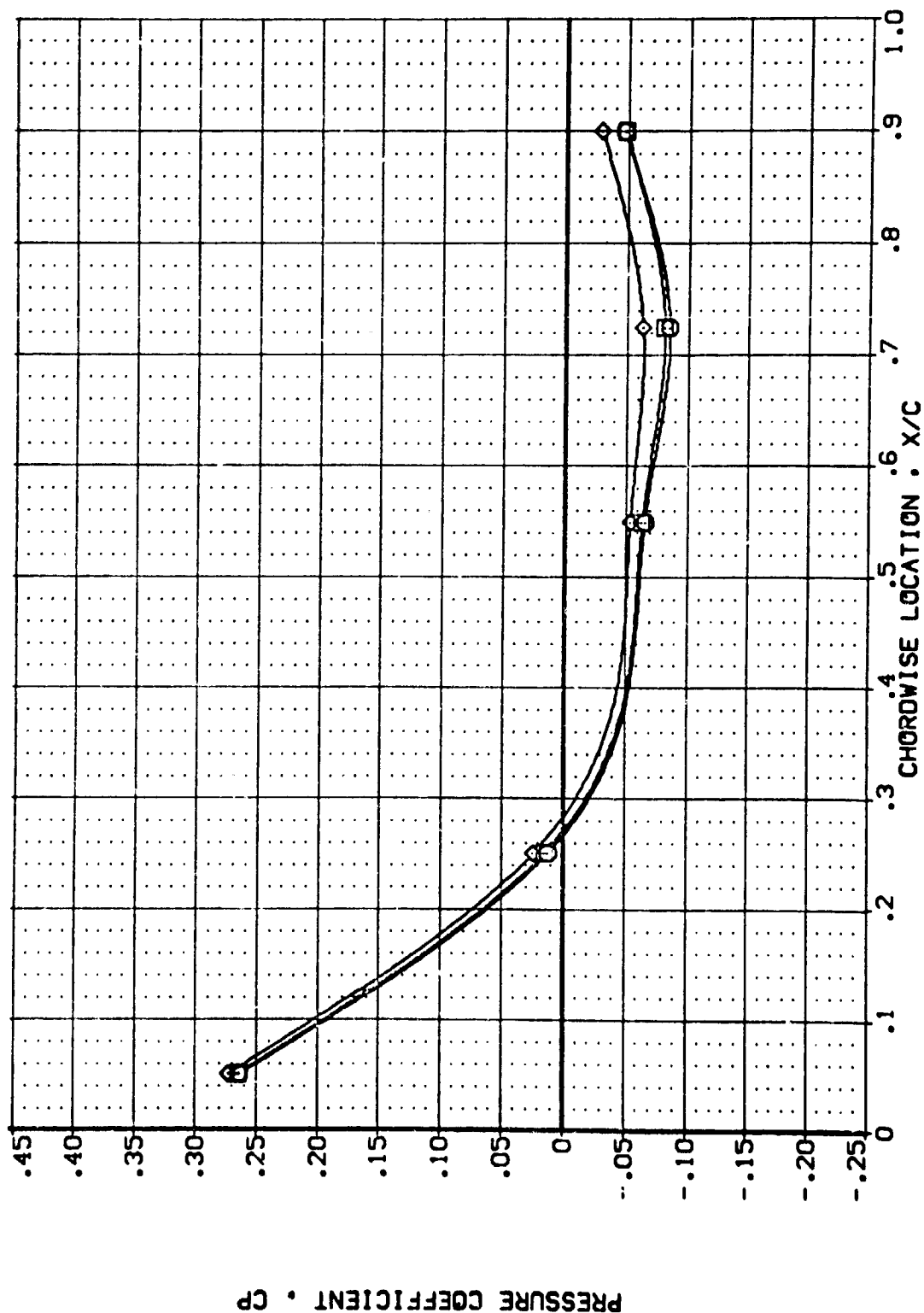
MACH = 3.000 ALPHA = -8.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CRR SRMR GIMBAL

(UB2038) ANES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 .000

(UB2041) ANES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE 1.000 .768

(UB2128) ANES 87-710 1A12C 01 T1 S1 M-3.5 PLUS UP WING PRS .000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

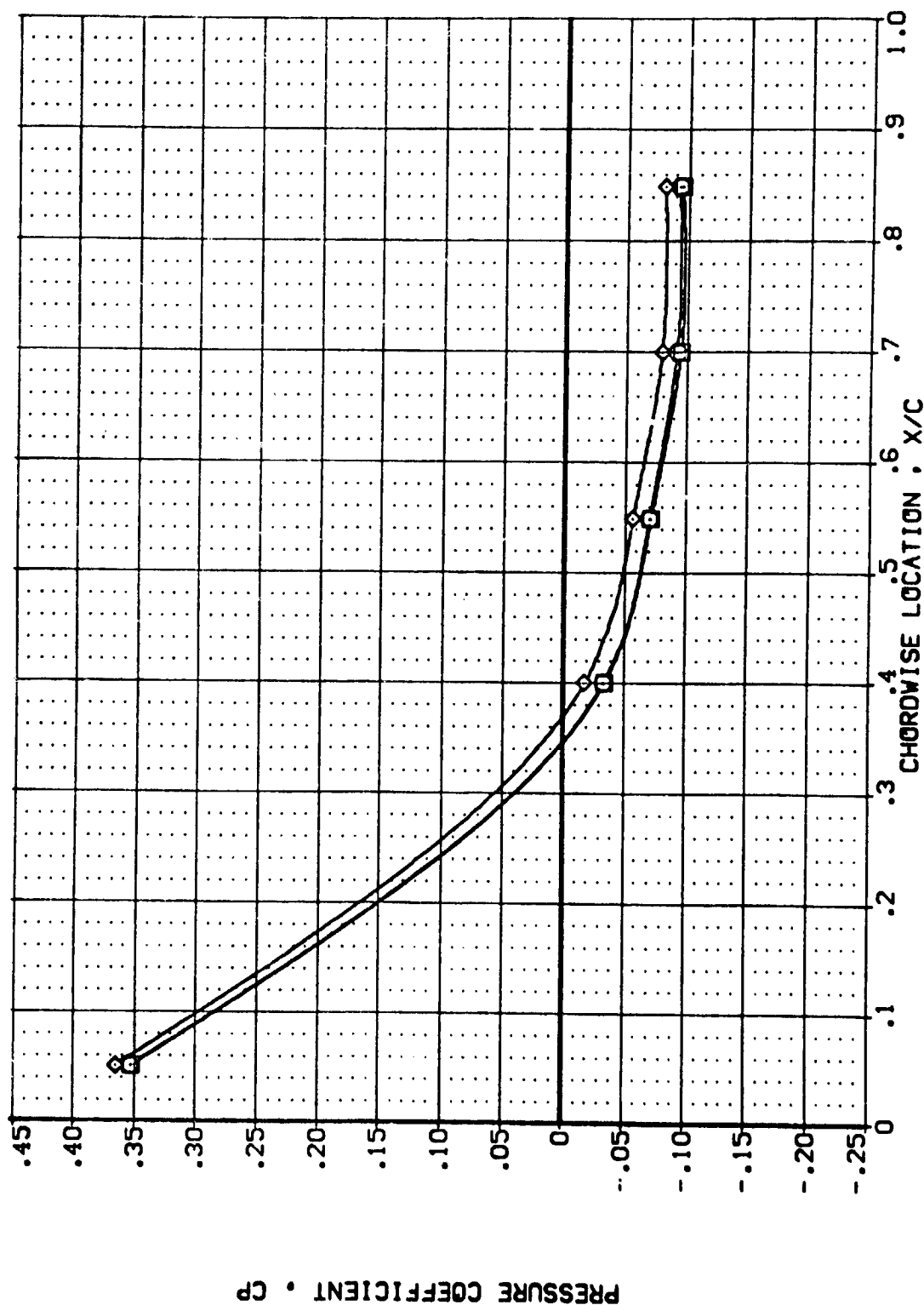
MACH = 3.000 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2038)
(UB2041)
(UB2128)

AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 M-3.5 PLUGS UP WING PHS

POWER 0.000 26.860 .768
GIMBAL 1.000 1.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

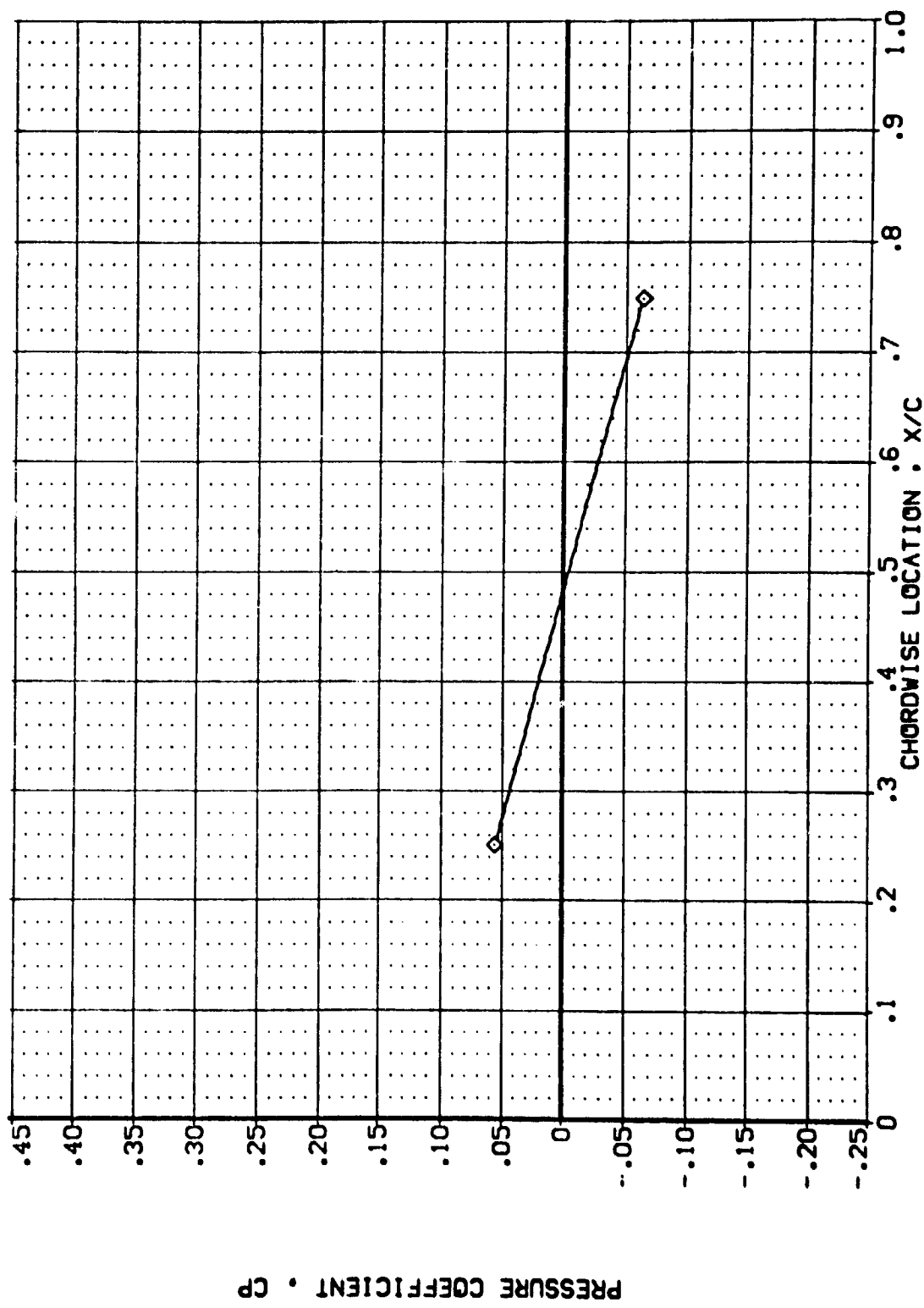
MACH = 3.000 ALPHA = -8.000 Y/B = .673 PAGE 688

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/M/R Q/IN/AL

(UB2038) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 26.860 .768 1.000

(UB2041) AYES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE 1.000 1.000

(UB2128) AYES 87-710 IAI2C 01 T1 S1 M-3.5 PLUS UP WING PHS .000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

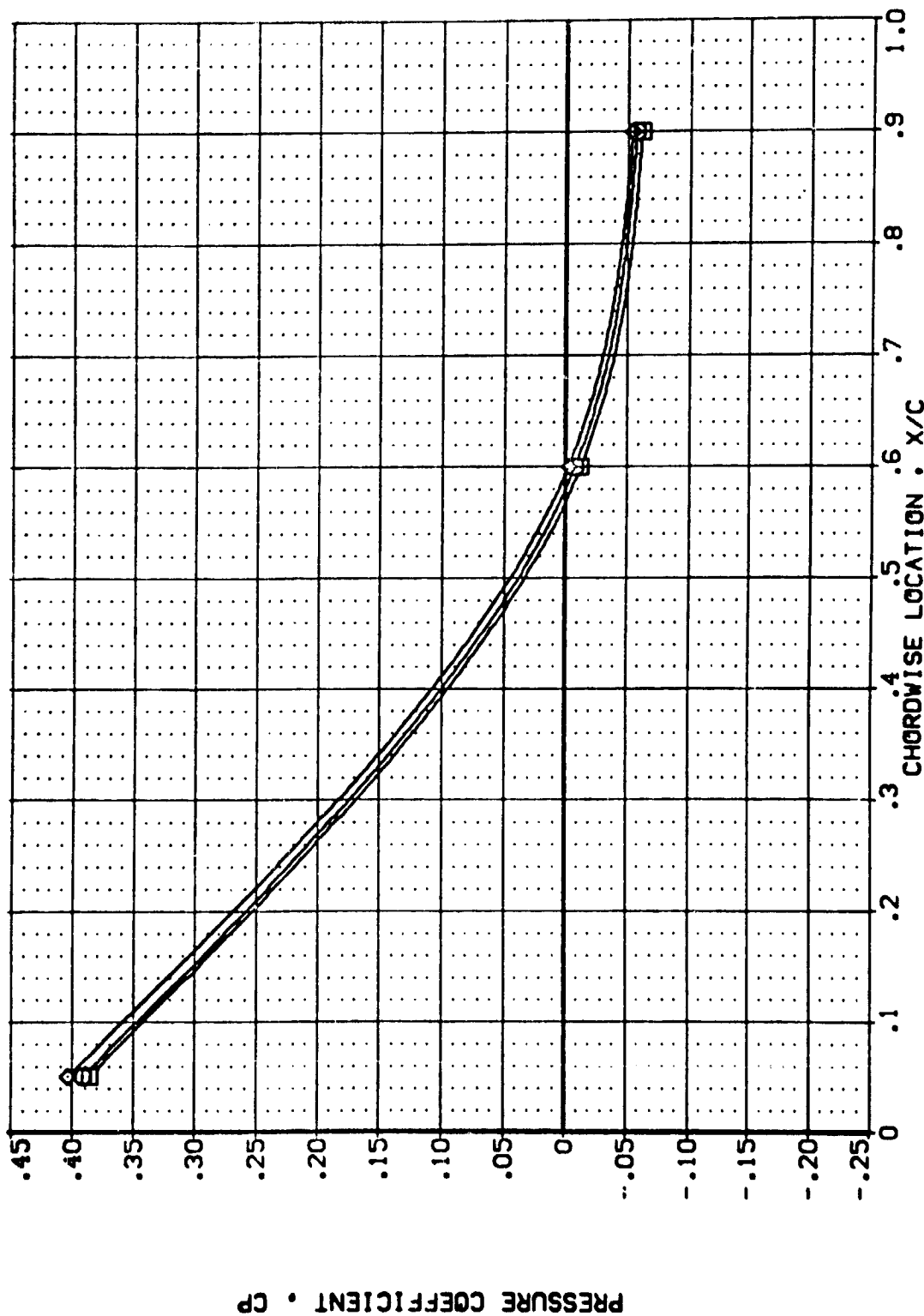
MACH = 3.000 ALPHA = -8.000 Y/B = .780 PAGE 689

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/P/R G/M/B/L

(UBZ008) AYES 87-710 IAI2C 01 T1 SI UPPER WING PRESSURE .000 26.860 .768 1.000

(UBZ041) AYES 87-710 IAI2C 01 T1 SI UPPER WING PRESSURE 1.000 1.000

(UBZ128) AYES 87-710 IAI2C 01 T1 SI M-3.5 PLUS UP WING PHS .000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = -8.000 Y/B = .887

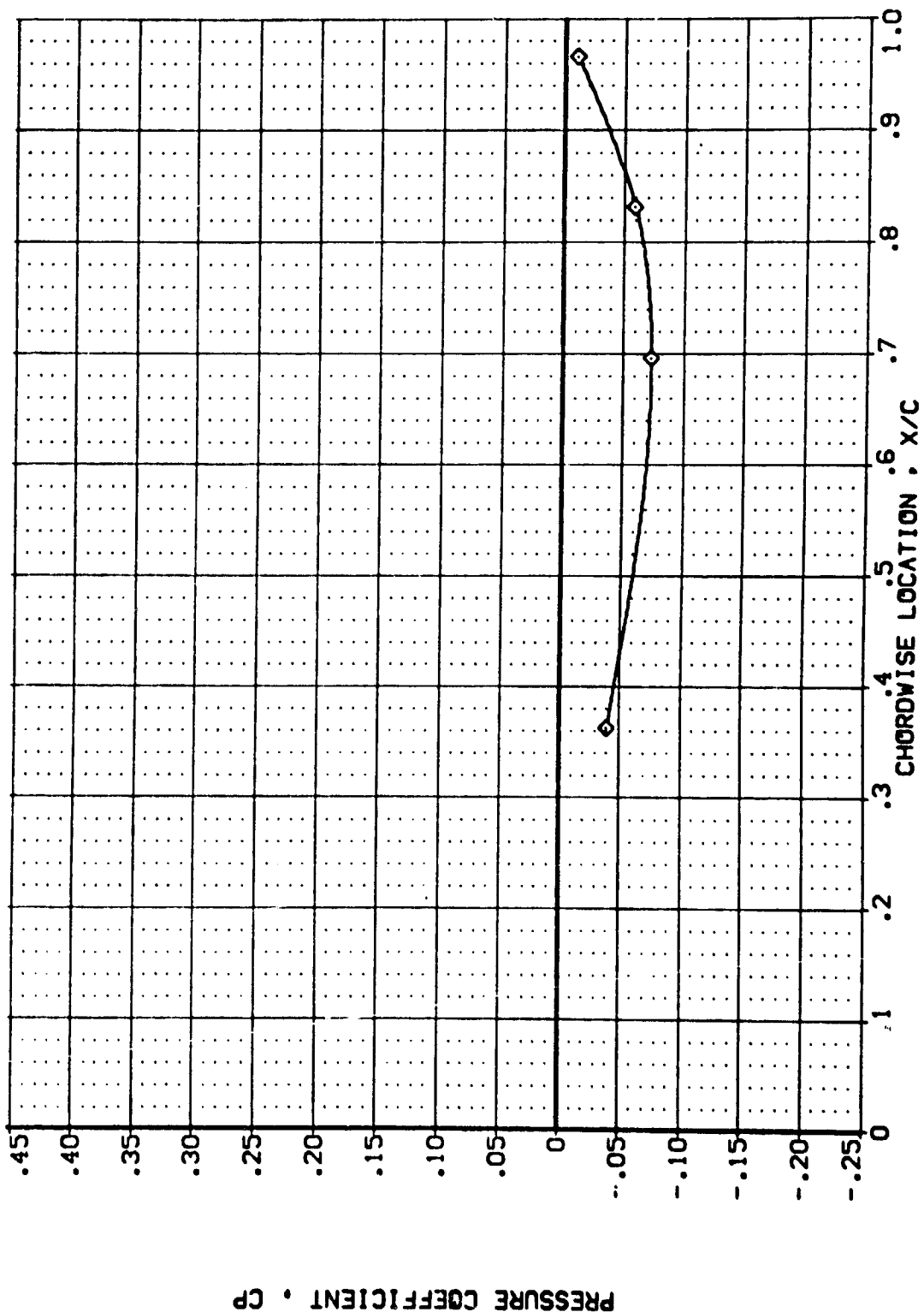
PAGE 690

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/PR S/M/R G/M/BAL

(UB20038) AYES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE 1.000 1.000

(UB2041) AYES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE 1.000 1.000

(UB2128) AYES 87-710 IALZC 01 T1 S1 M-3.5 PLUS UP WING PMS 1.000 .768

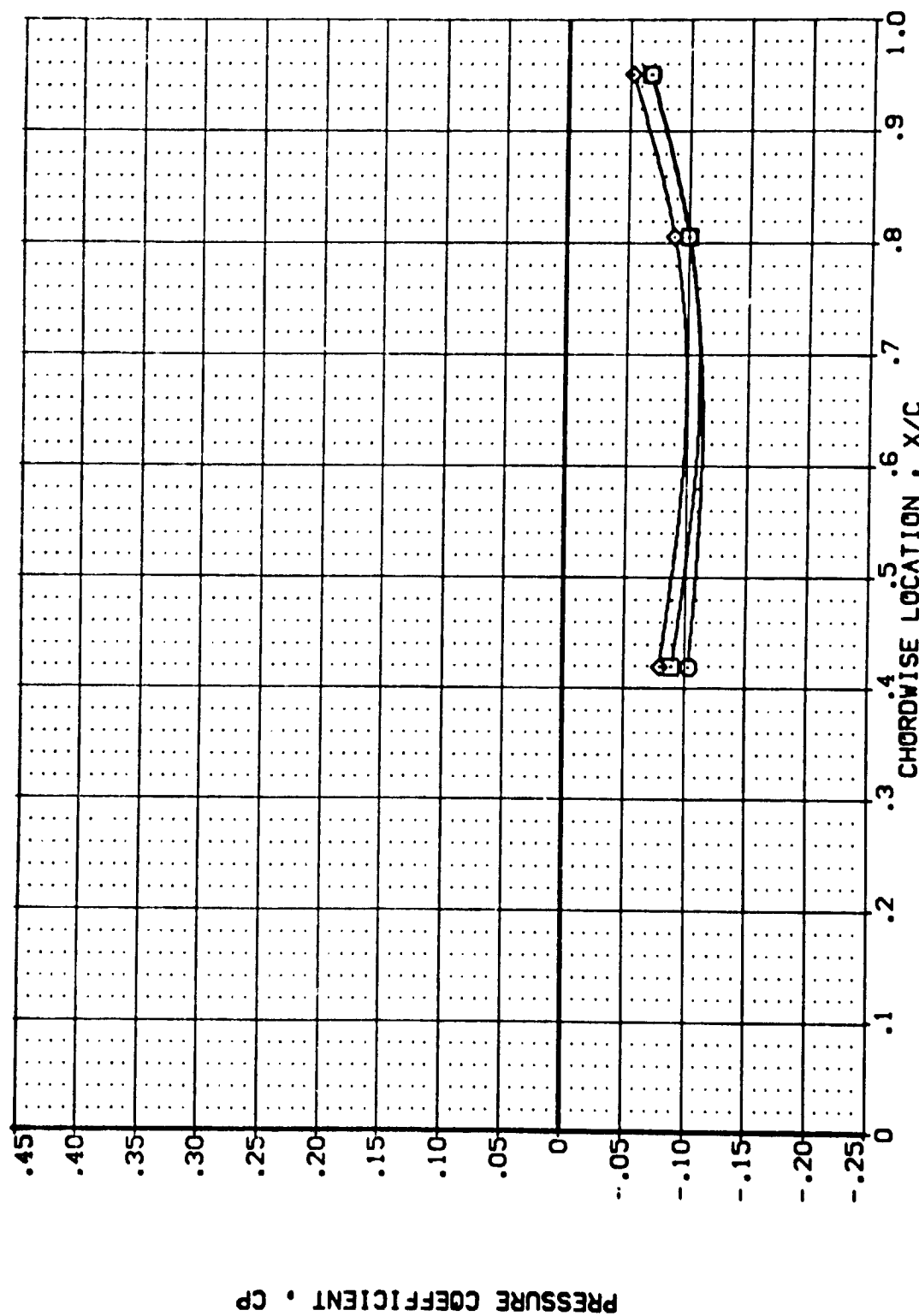


EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB0008) AYES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE POWER 0.000 GIMBAL 1.000
 (UB2041) AYES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE 1.000 .768
 (UB2128) AYES 87-710 1A12C 01 T1 S1 M-3.5 PLUGS UP WING PPS .000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

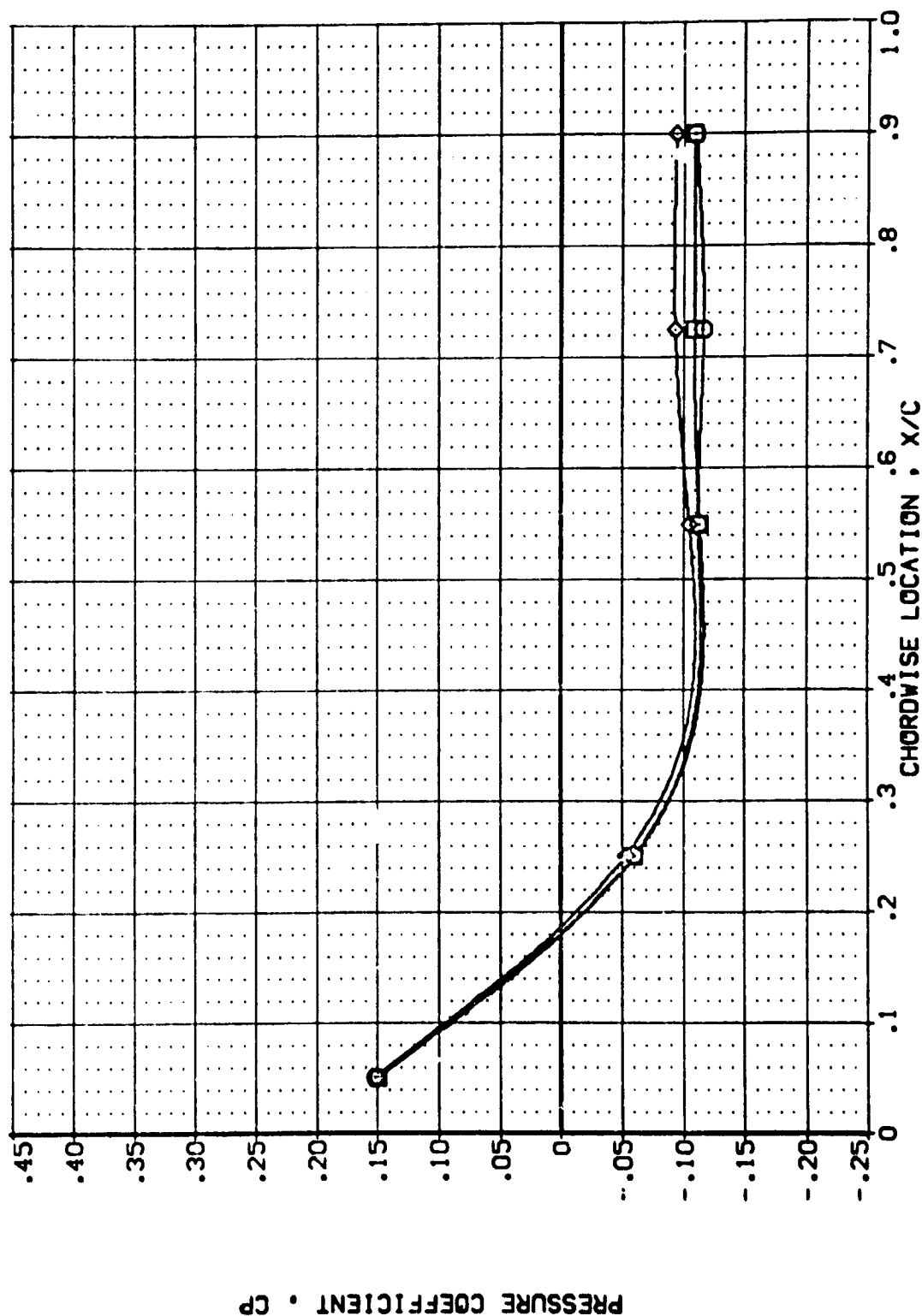
MACH = 3.000 ALPHA = .000 Y/B = .427 PAGE 692

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CPR SRRPR GIMBAL

(UBZ008) ANES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 .000 .000 1.000

(UBZ041) ANES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE 1.000 26.860 .768 1.000

(UBZ128) ANES 87-710 1A12C 01 T1 S1 M-3.5 PLUS UP WING PRS .000 .000 .000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

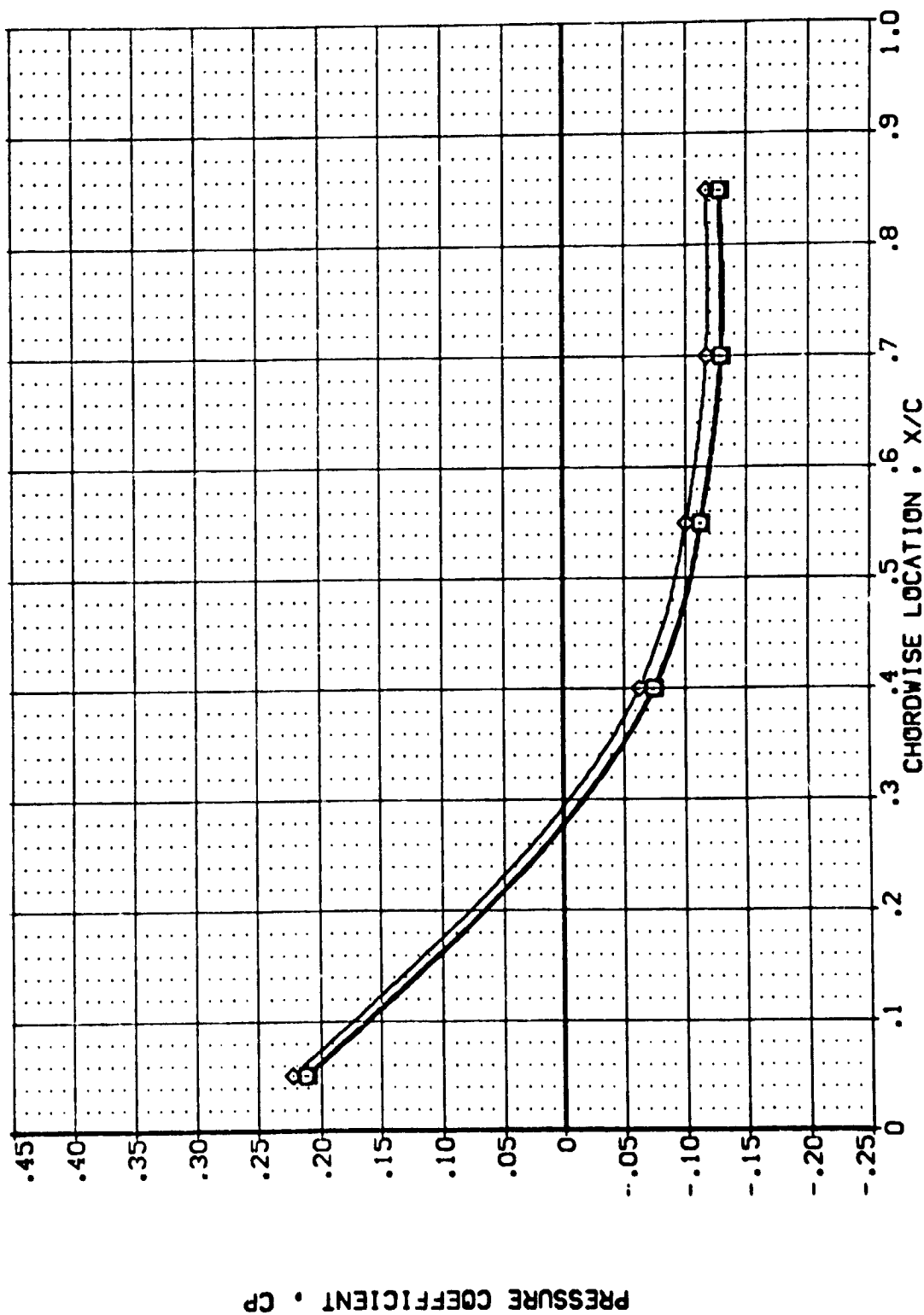
MACH = 3.000 ALPHA = .000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CPR SPMR GIMBAL

(UB2038) ○ AYES 87-710 IAL2C 01 T1 S1 UPPER WING PRESSURE 1.000 .768 1.000

(UB2041) ○ AYES 87-710 IAL2C 01 T1 S1 UPPER WING PRESSURE 1.000 .768 1.000

(UB2128) ○ AYES 87-710 IAL2C 01 T1 S1 M-3.5 PLUS UP WING PPS 1.000 .768 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .673 PAGE 694

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ038)

(UBZ041)

(UBZ128)

AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE

AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE

AVES 87-710 1A12C 01 T1 S1 M-3.5 PLANS UP WING PPS

POWER 0.000

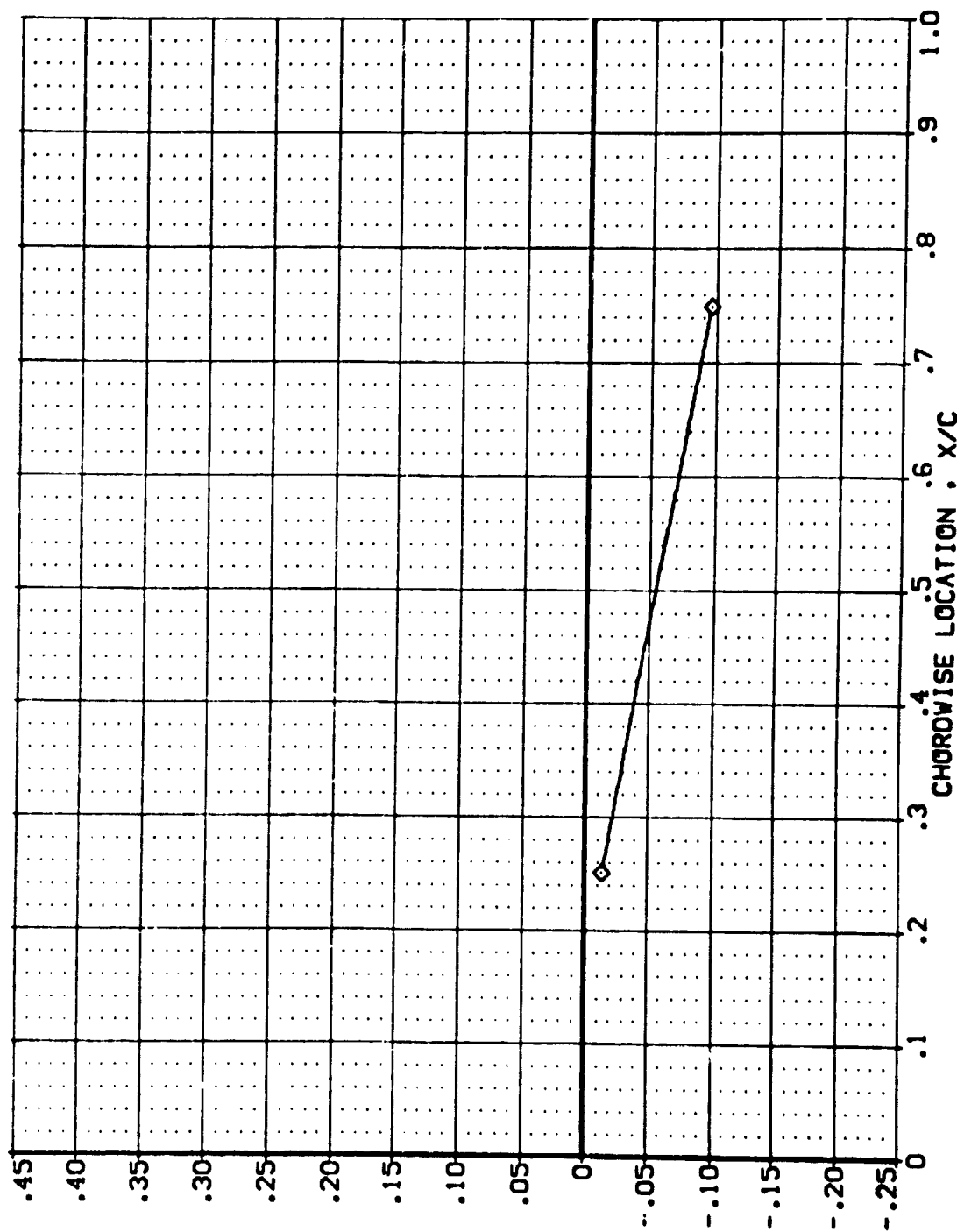
GPR 26.860

SPRPR .768

GINBAL 1.000

GINBAL 1.000

GINBAL 1.000



PRESSURE COEFFICIENT • CP

EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .780

DATA SET SYMBOL

(L82008)
(L82041)
(L82128)

CONFIGURATION DESCRIPTION

AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 M-3.5 PLANS UP WING PRES

POWER

1.000
1.000
1.000

OPR

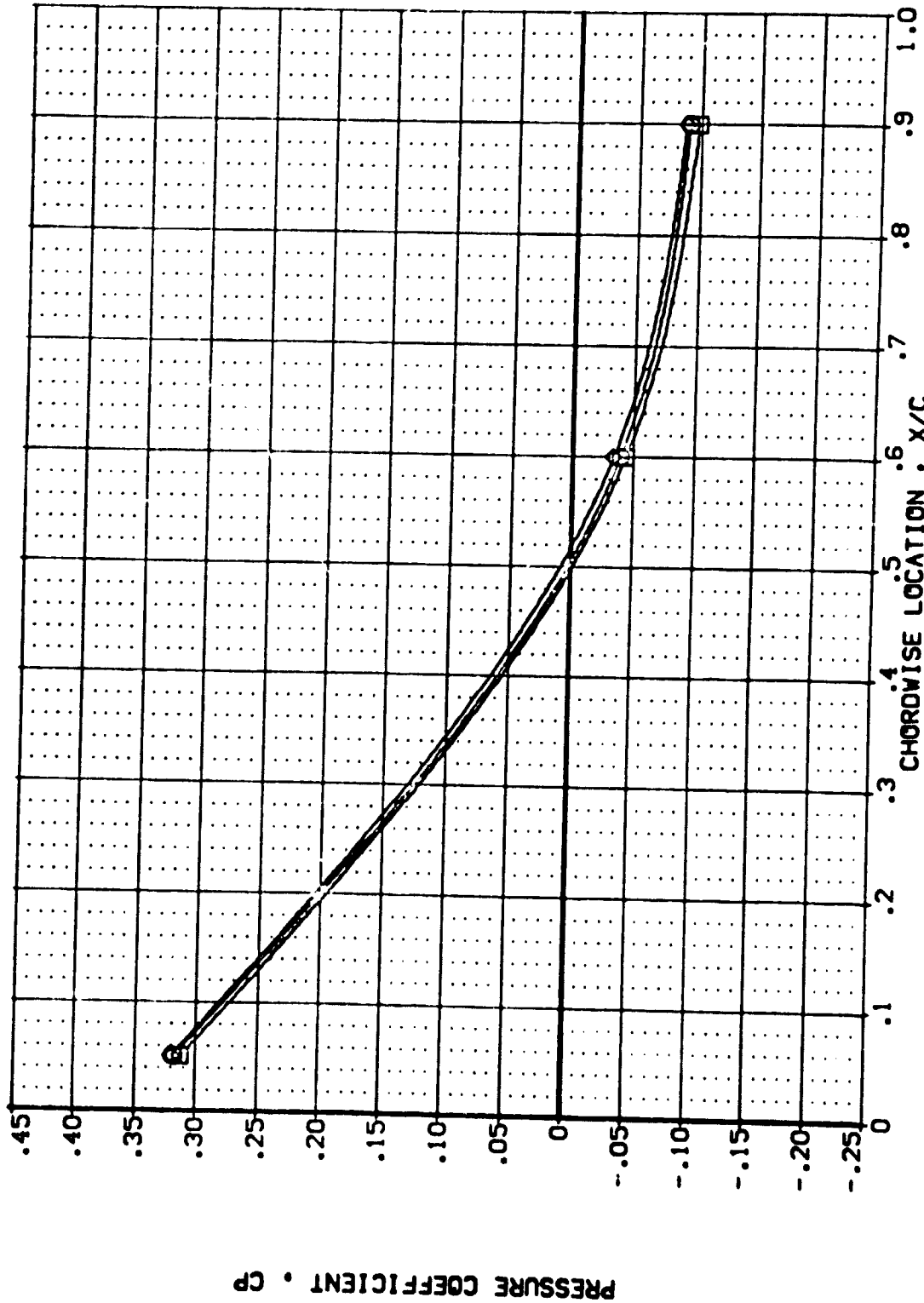
25.860

SWPR

.768

GIMBAL

1.000
1.000
1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = .000 Y/B = .887

DATA SET SYMBOL: (LBZ009) (LBZ041) (LBZ128)

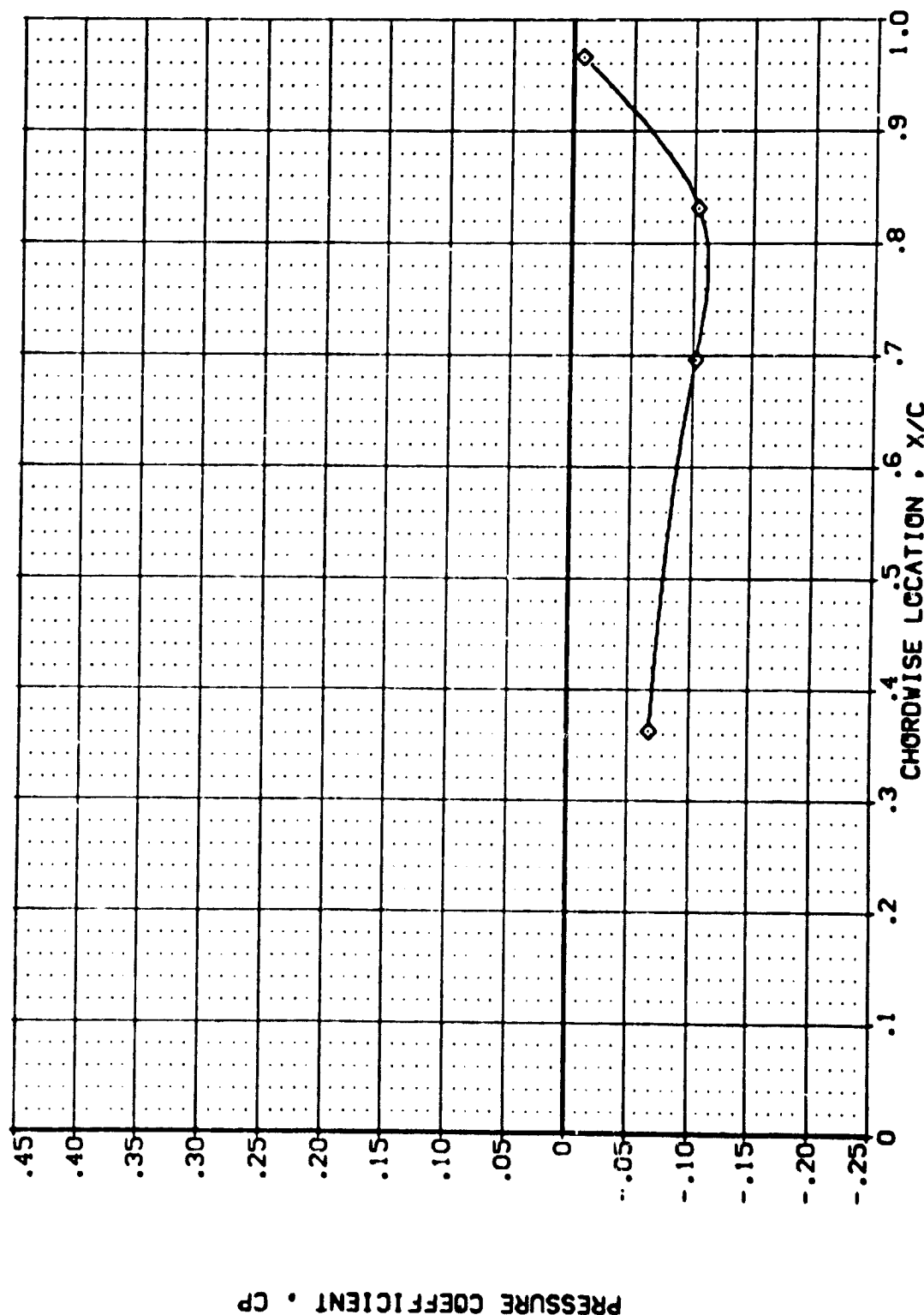
CONFIGURATION DESCRIPTION: ASES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE ASES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE ASES 87-710 IALZC 01 T1 S1 M-3.5 PLUS UP WING PRES

POWER: .000 .000 .000

DPR: 25.860

SPRPR: .768

GIMBAL: 1.000 1.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ008)
(UBZ041)
(UBZ128)

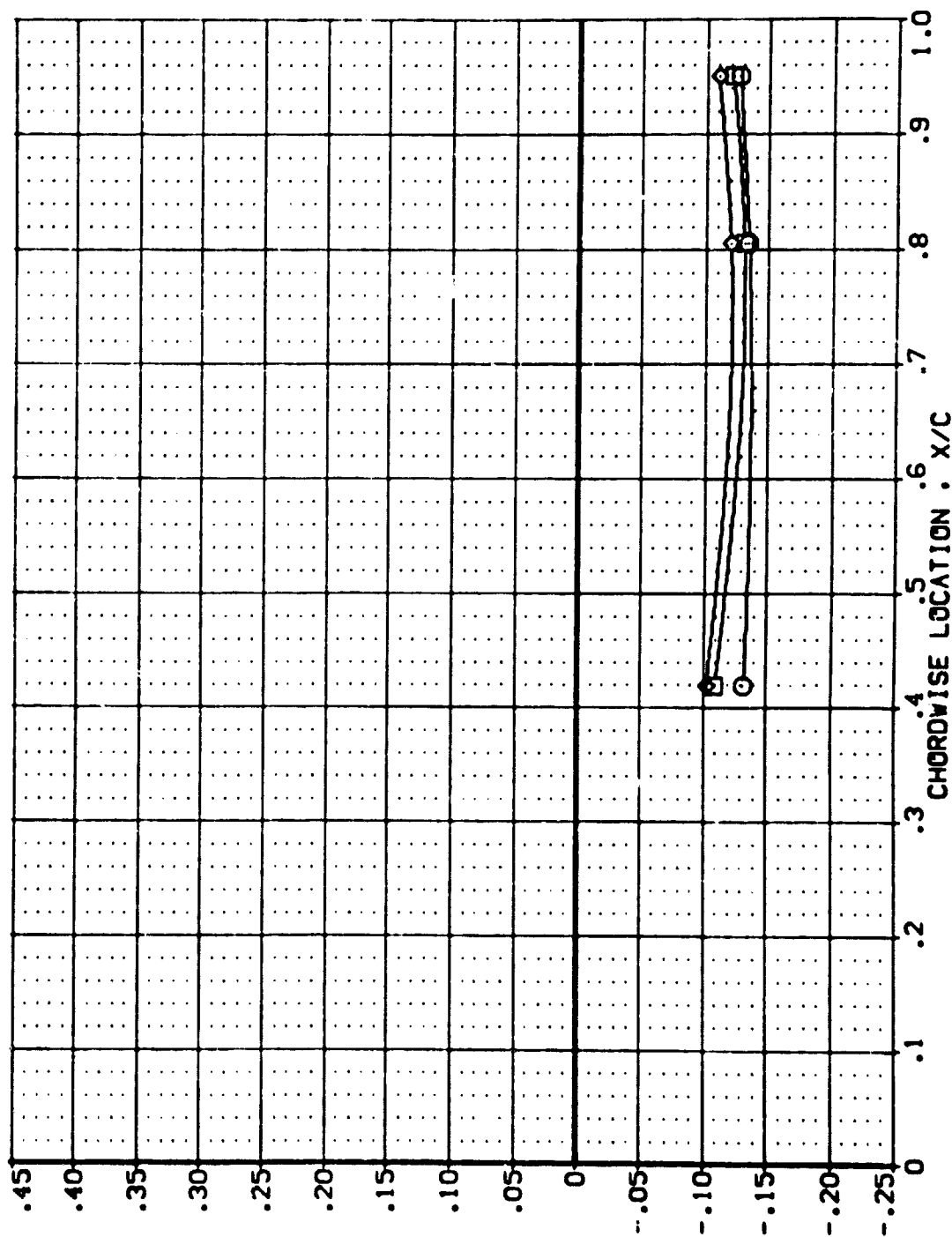
AVES 07-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 07-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 07-710 1A12C 01 T1 S1 M-3.5 PLUG UP WING PHS

POWER 0.000
0.000
1.000
26.860
0.768
0.000
0.000
0.000

SWAMP

0.000
1.000
1.000

PRESSURE COEFFICIENT • CP



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

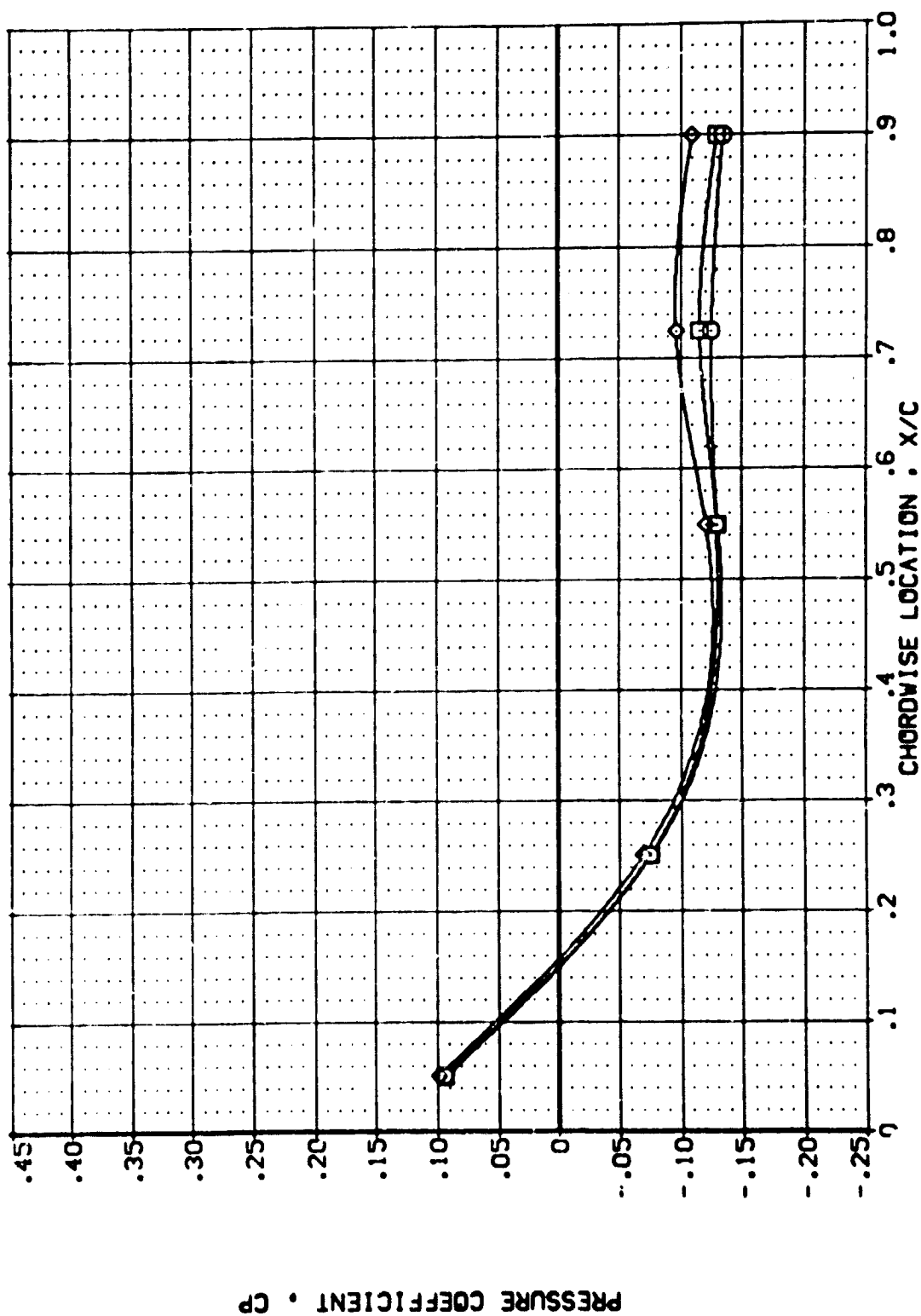
MACH = 3.000 ALPHA = 8.000 Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CPR SP-PR GIMBAL

(UB2008) AVE5 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 1.000

(UB2041) AVE5 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE 1.000 26.660 .769 1.000

(UB2128) AVE5 87-710 IAI2C 01 T1 S1 M-3.5 PLUS UP WING PRS 1.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

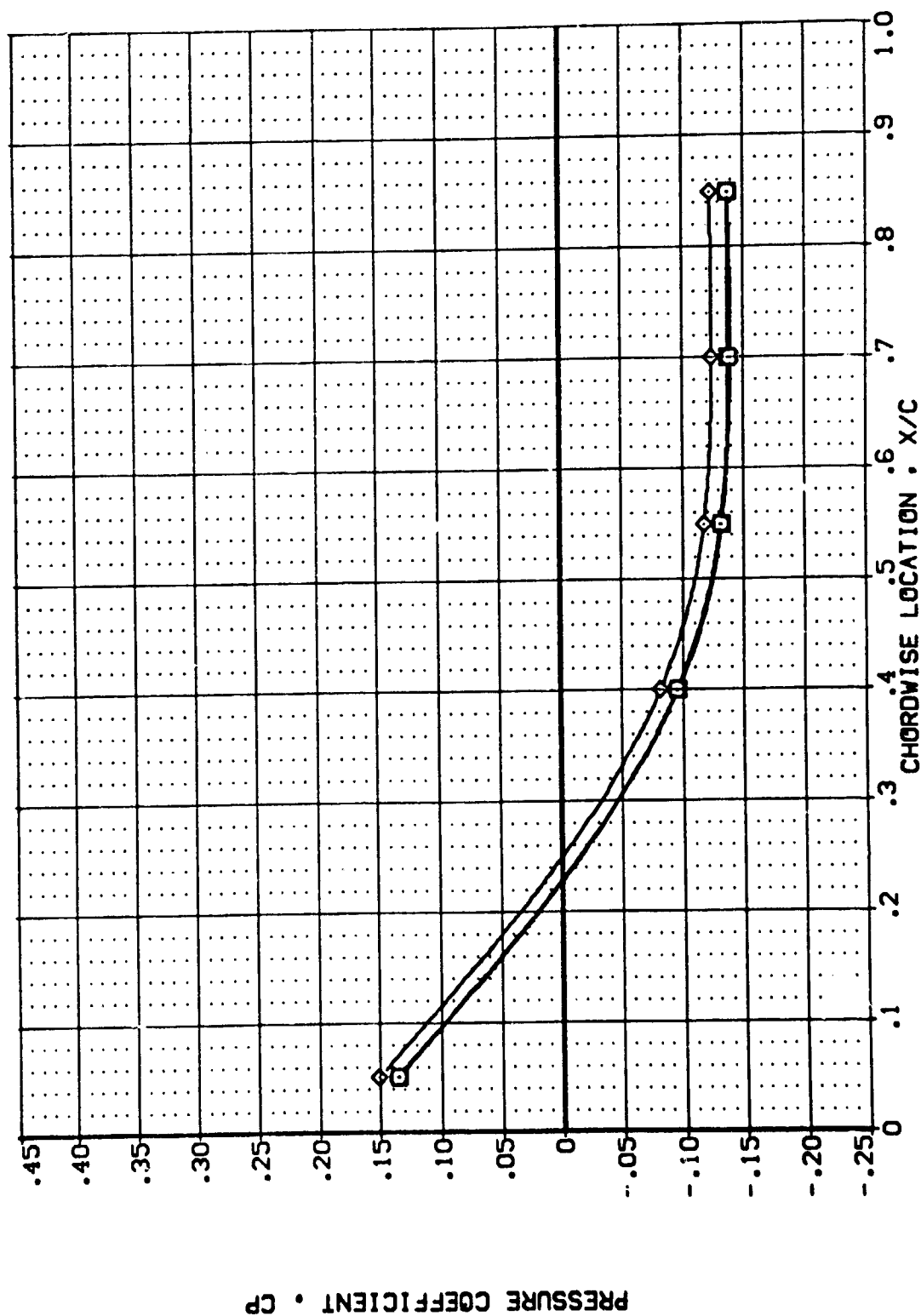
MACH = 3.000 ALPHA = 8.000 Y/B = .534

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/PR S/WFR GIMBAL

(UB 0008) ASES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE 1.000 26.860 .768 1.000

(LBZ041) ASES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE 1.000 26.860 .768 1.000

(LBZ128) ASES 87-710 1A12C 01 T1 S1 H-3.5 PUS UP WING PMS 1.000 26.860 .768 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

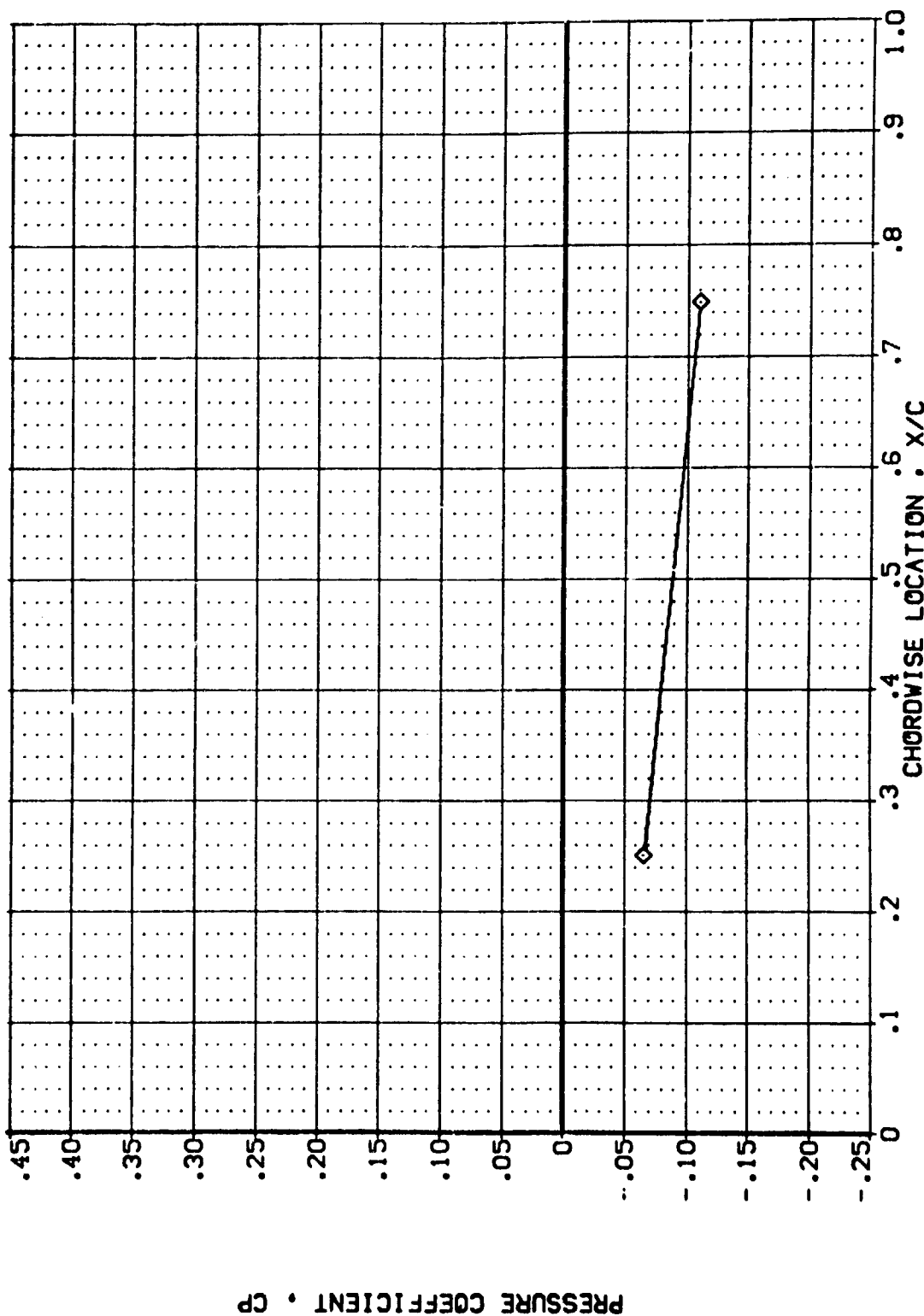
MACH = 3.000 ALPHA = 8.000 Y/B = .673 PAGE 700

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZ028)
(UBZ041)
(UBZ128)

AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 H-3.5 PLUS UP WING FAS

POWER C/P R S/P P/R GINGAL
1.000 26.860 .768 1.000
1.000 1.000 1.000



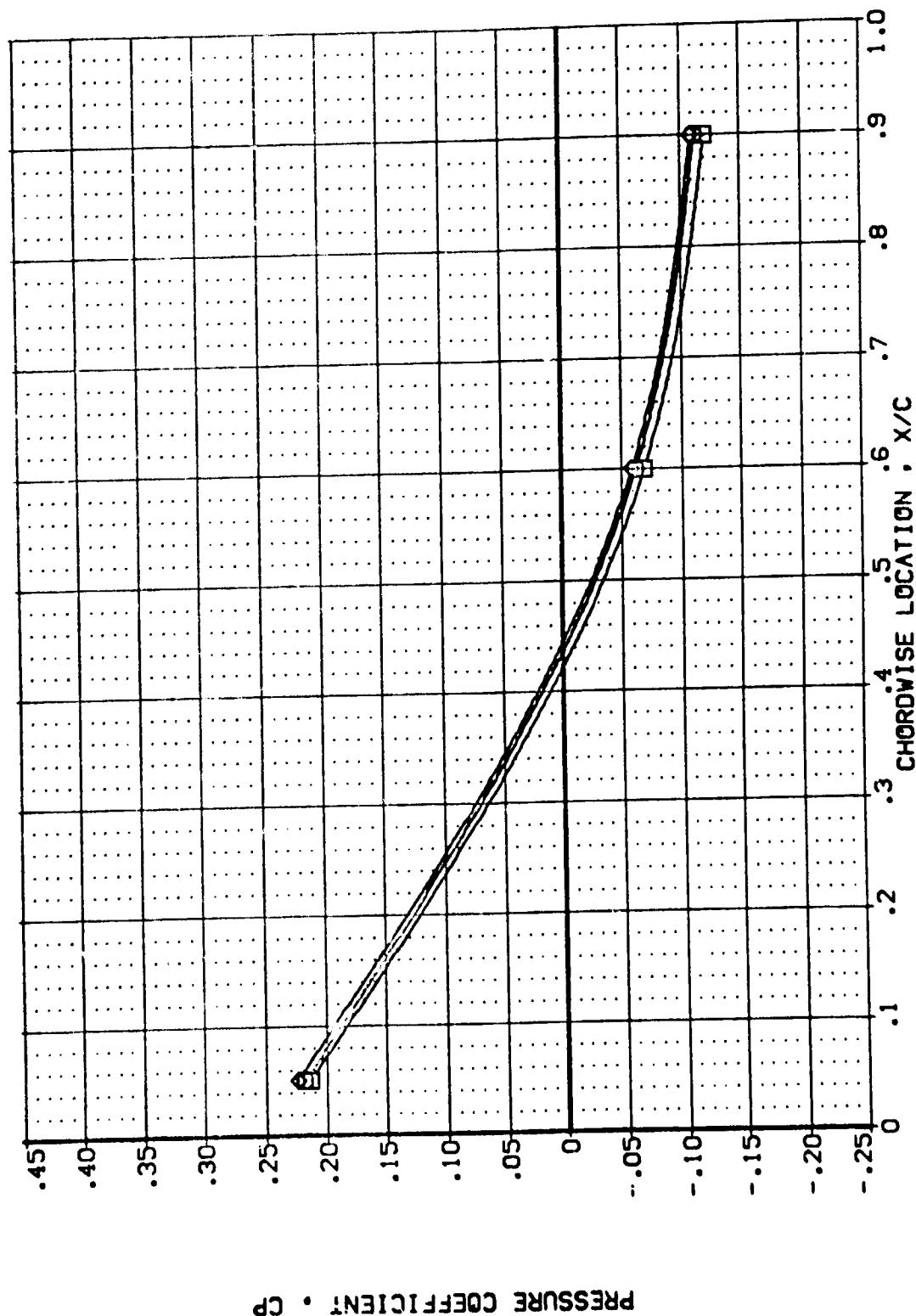
EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.000 ALPHA = 8.000 Y/B = .780

(UBZ038)
 (UBZ041)
 (UBZ128)

CONFIGURATION	DESCRIPTION
AVES 87-710	1A12C 01 T1 S1
AVES 87-710	1A12C 01 T1 S1
AVES 87-710	1A12C 01 T1 S1
AVES 87-710	1A12C 01 T1 S1

POWER	OPR	STPR	GINSAL
.000			1.000
1.000	25.860	.768	1.000
.000			1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

MACH =	3.000	ALPHA =	8.000	Y/B =	.887
--------	-------	---------	-------	-------	------

PAGE 702

DATA SET SYMBOL

(UBZ046)
(UBZ050)
(UBZ131)

CONFIGURATION DESCRIPTION

AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 M-3.5 PLUS UP WING PMS

POWER

.000
1.000
.000

OPR

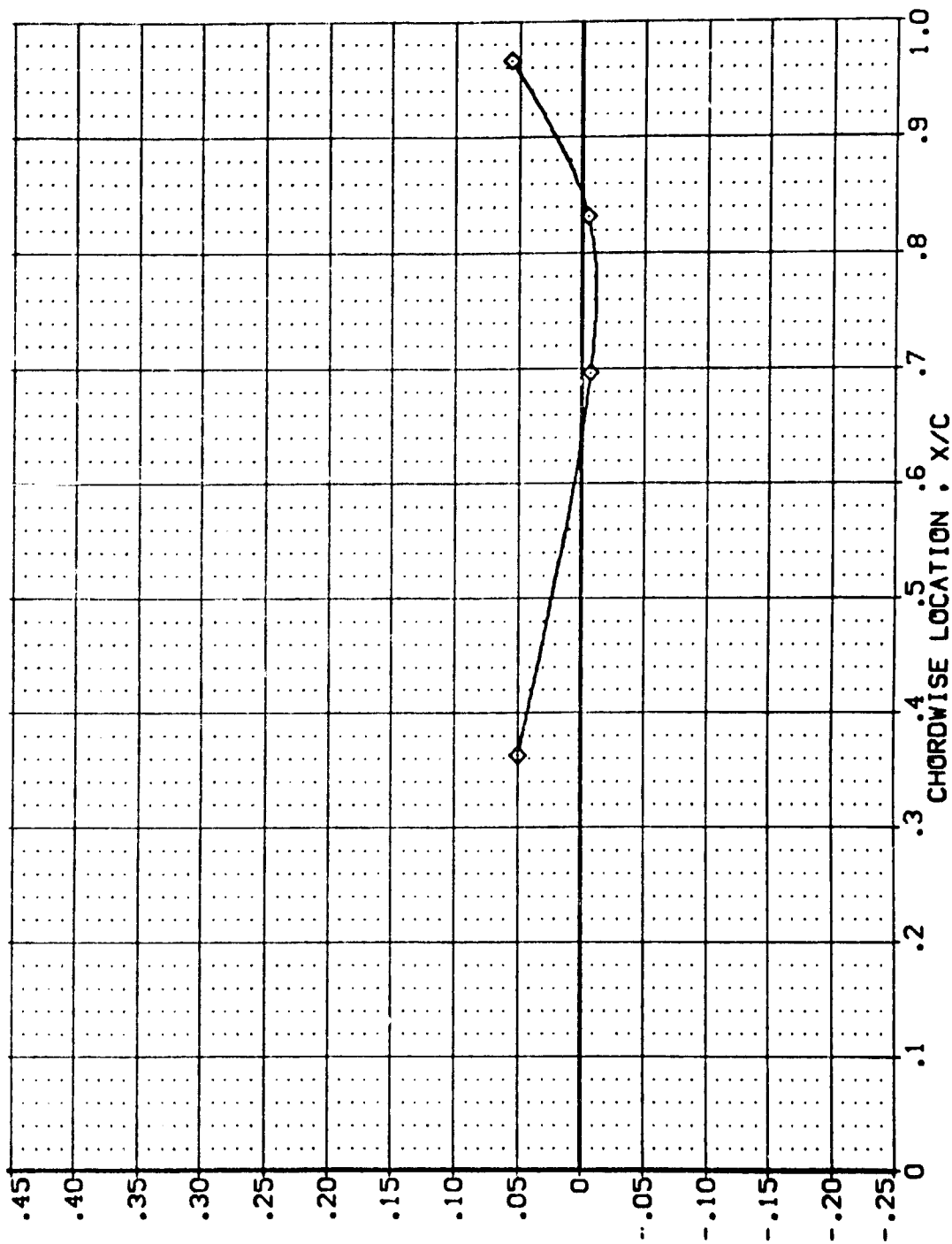
23.8430

SMFR

.826

G1/BAL

1.000
1.000
1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

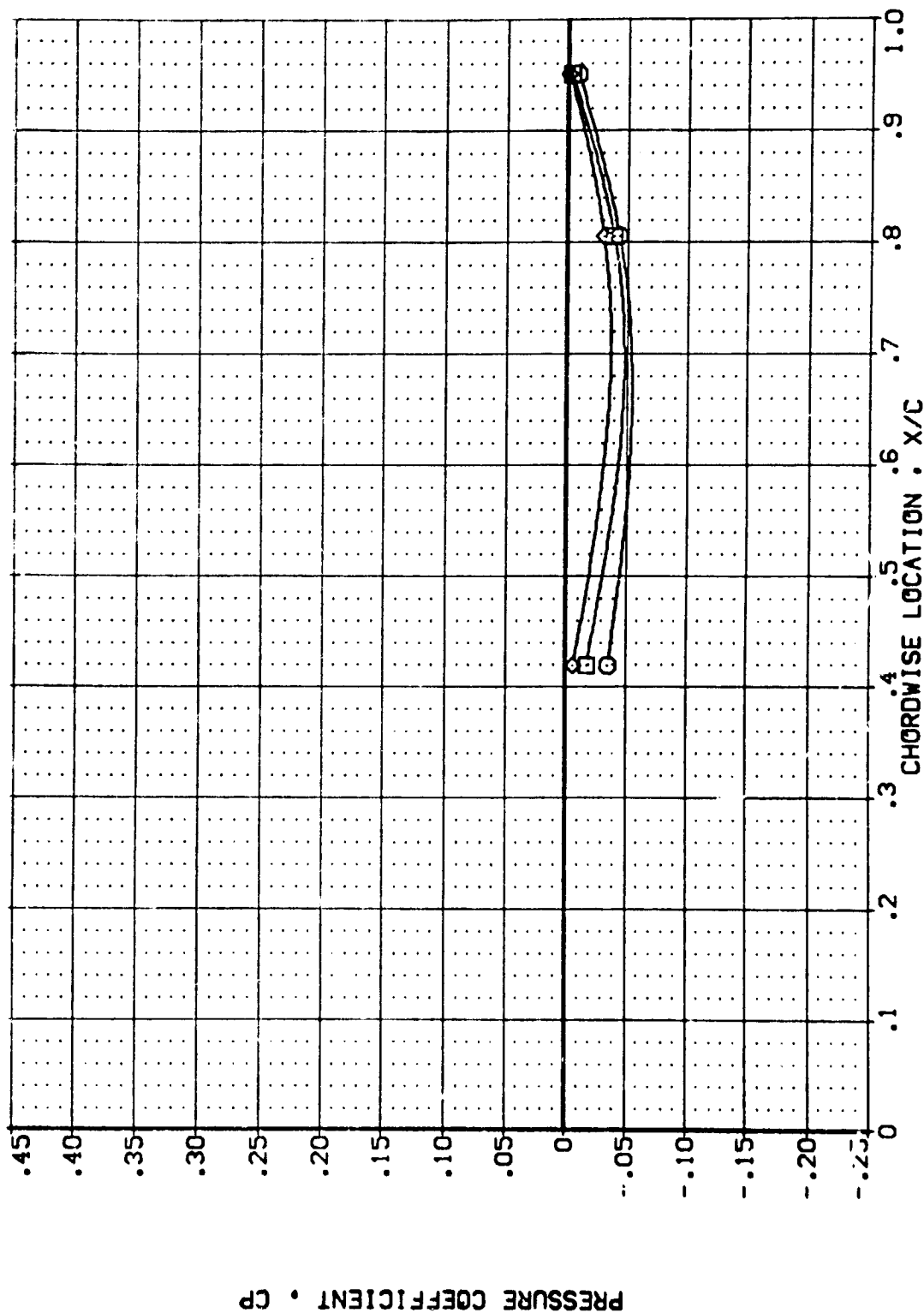
MACH = 3.500 ALPHA = -8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UBZD46)
(UBZD50)
(UBZ131)

AVES 87-710 IAI2C 01 TI SI UPPER WING PRESSURE
AVES 87-710 IAI2C 01 TI SI UPPER WING PRESSURE
AVES 87-710 IAI2C 01 TI SI M-3.5 PLUG UP WING PPS

POWER C/R S/R/R G/H/E/L
.000 23.860 .826 1.000
1.000 1.000 1.000



PRESSURE COEFFICIENT • CP

EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

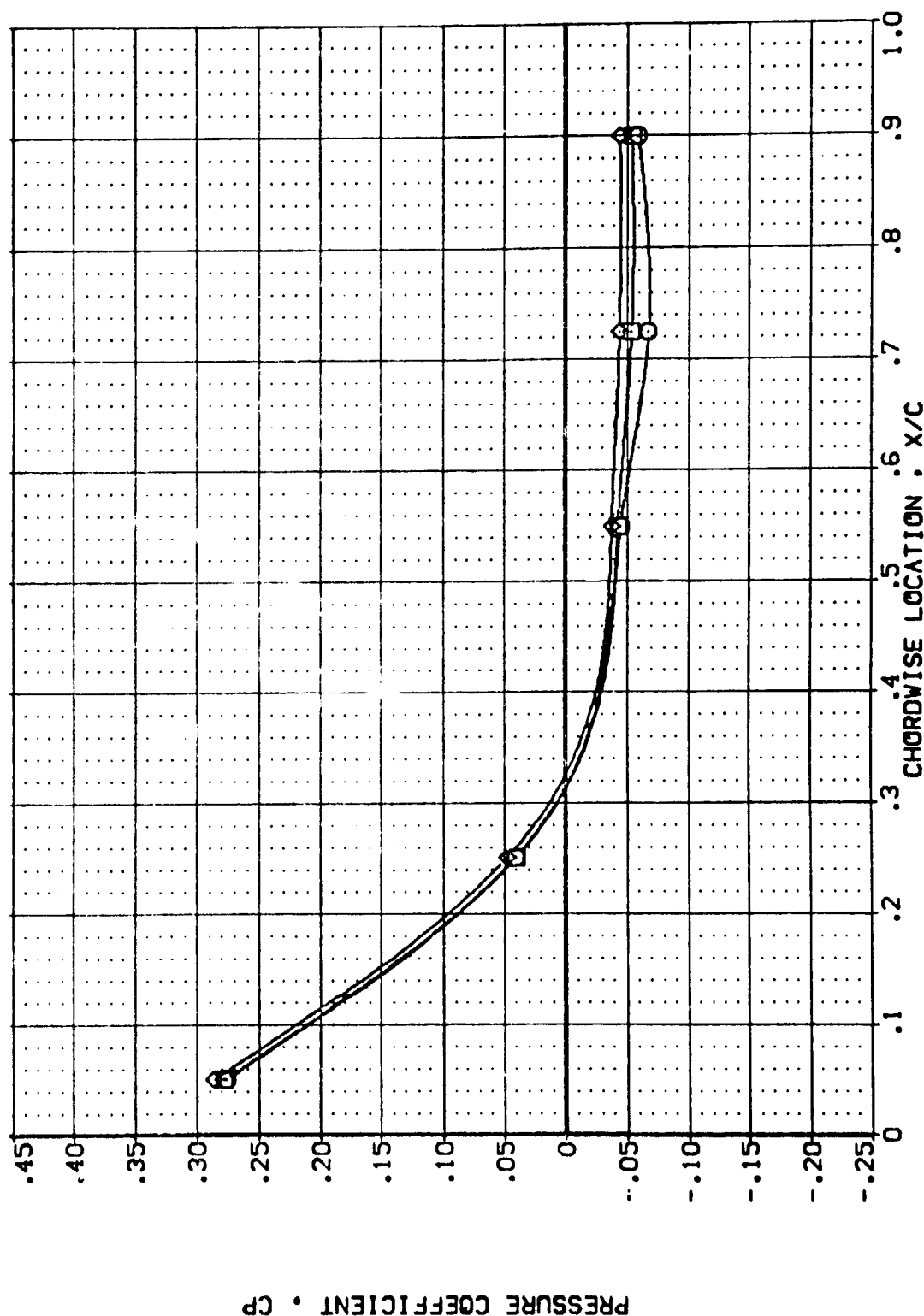
MACH = 3.500 ALPHA = -8.000 Y/B = .427 PAGE 704

DATA SET SYMBOL. CONFIGURATION DESCRIPTION

(UBZ046)
(UBZ050)
(UBZ131)

AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 H-3.5 PLUS UP WING PPS

POWER C/PR S/P-R GIMBAL
.000 .826 1.000
1.000 1.000 1.000



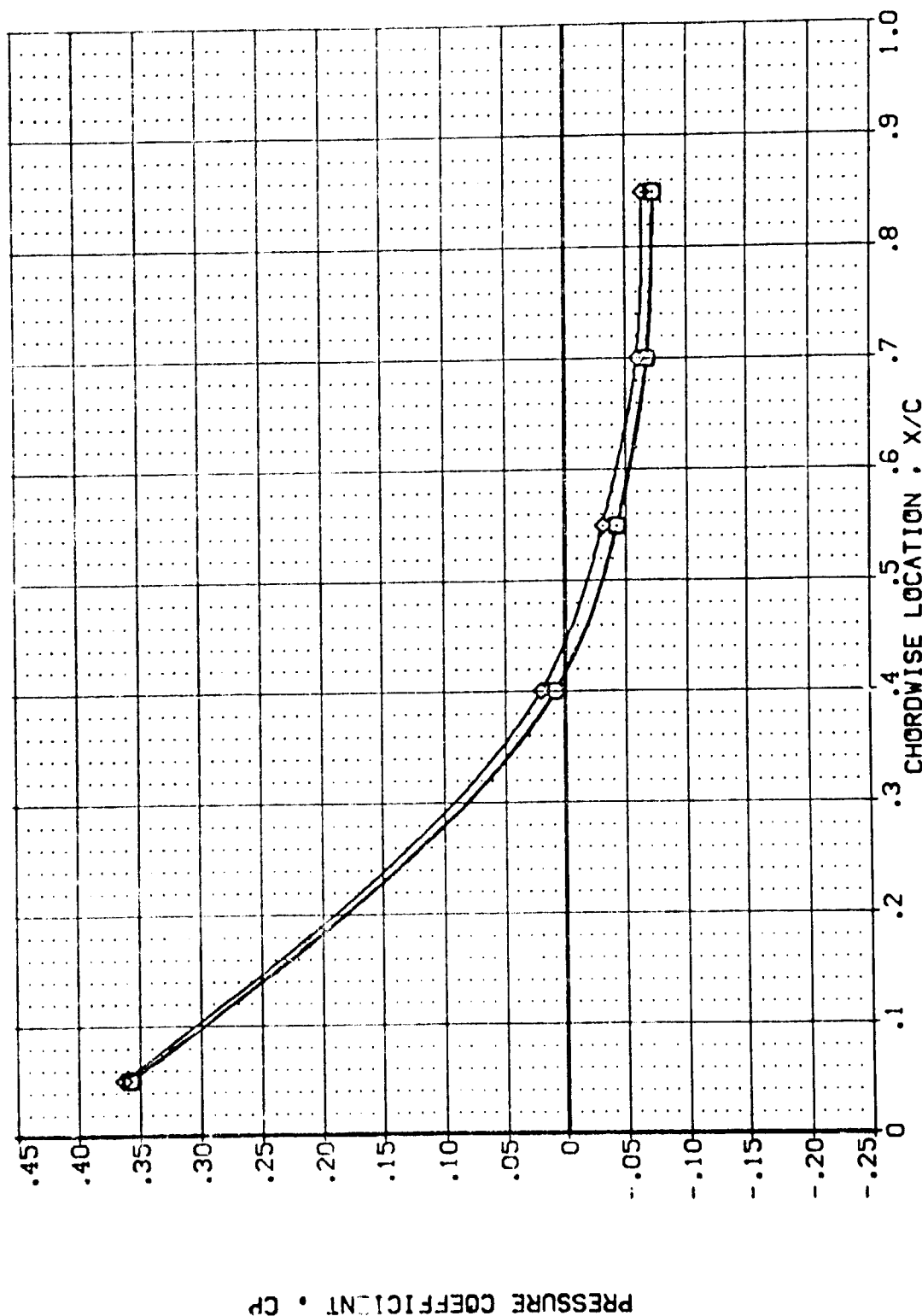
EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = -8.000 Y/B = .534

DATA SET SYMBOL
(UBZ046)
(UBZ050)
(UBZ131)

CONFIGURATION DESCRIPTION
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 M-3.5 PLUMS UP VNG PRG

POWER GPR SRPR GIMBAL
.000
1.000
23.860
.826
1.000
1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

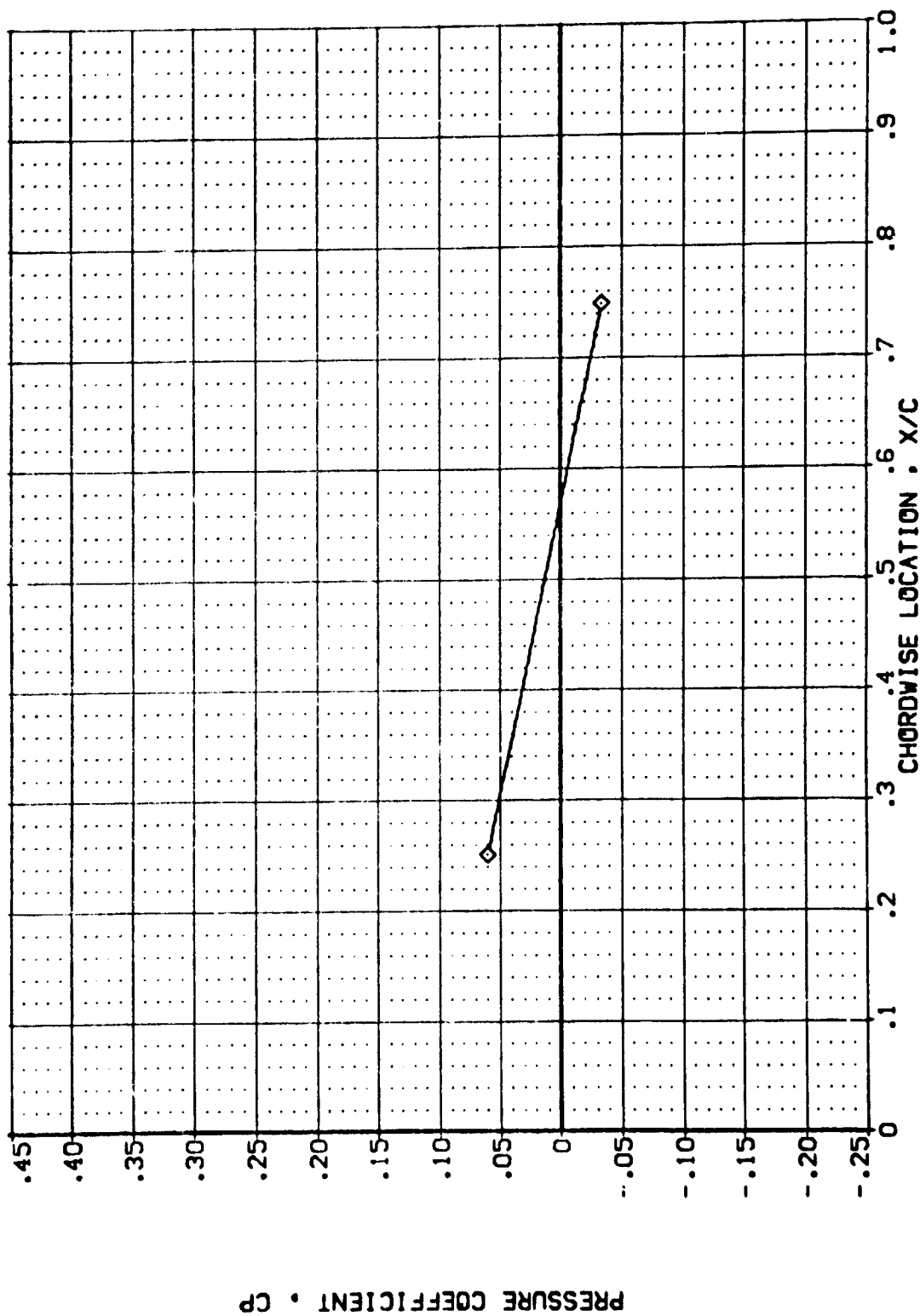
MACH = 3.500 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2046)
(UB2050)
(UB2131)

AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 H-3.5 PLUS UP WING PMS

POWER DFR SFRPR GIMBAL
.000 23.860 .826 1.000
1.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

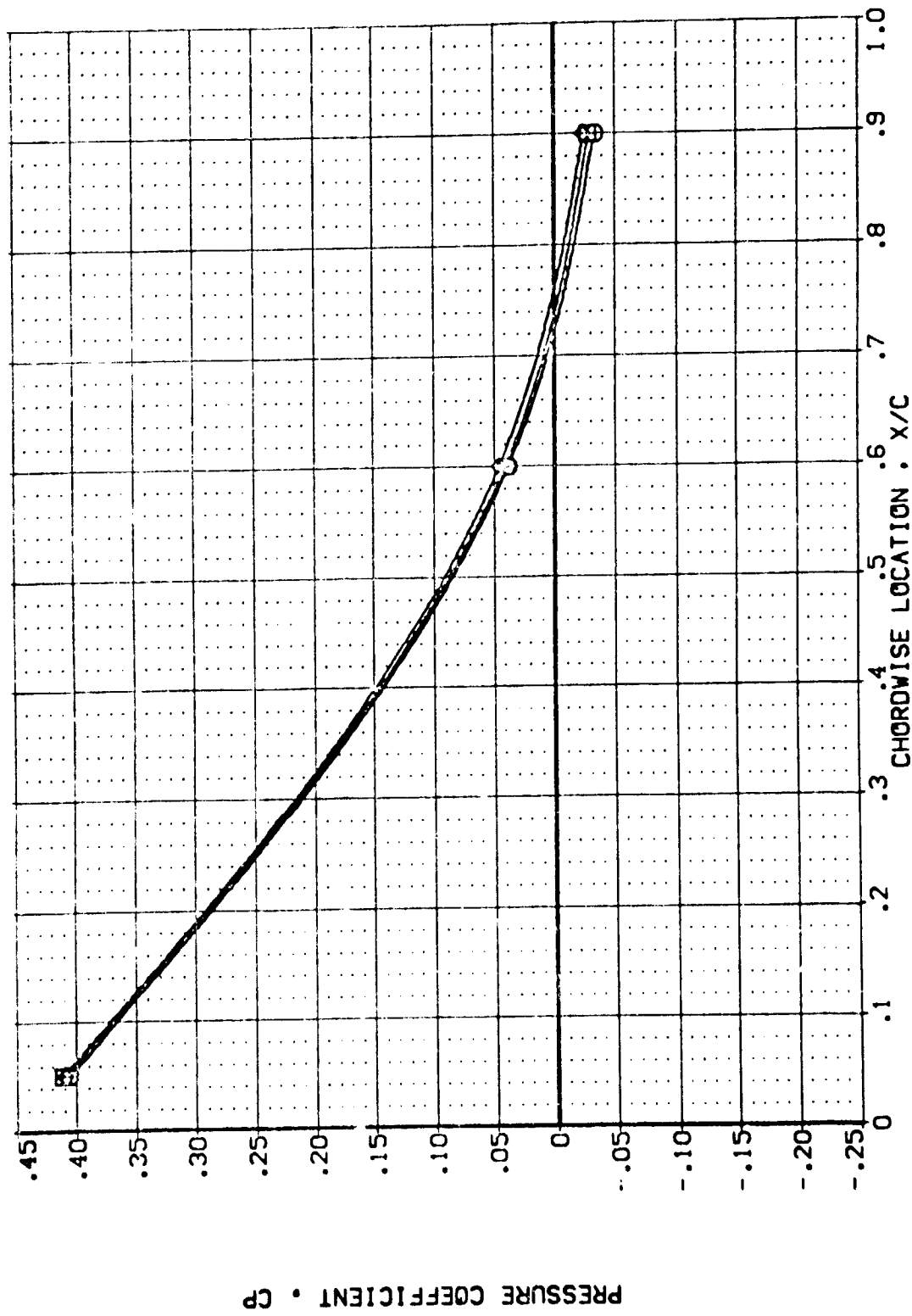
MACH = 3.500 ALPHA = -8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER QPR SQPR GIMBAL

(UBZ046) ASES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 23.860 .826 1.000

(UBZ050) ASES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE 1.000 1.000

(UBZ131) ASES 87-710 1A12C 01 T1 S1 H-3.5 PUS UP WING PMS .000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

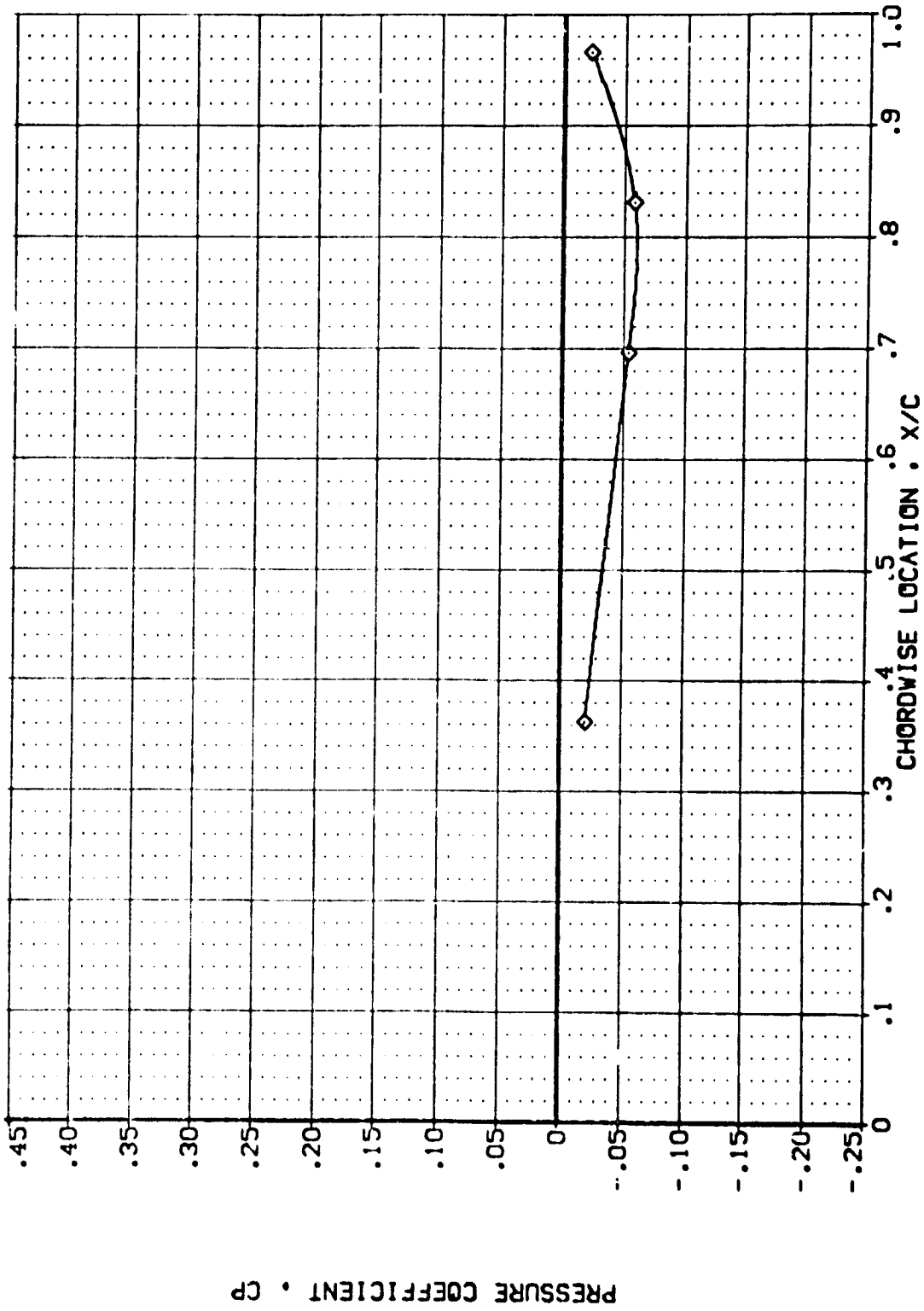
MACH = 3.500 ALPHA = -8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(UB2046)
(UB2050)
(UB2131)

AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 M-3.5 PLAS UP WING PPS

POWER DPR SWPR GIMBAL
.000 23.860 .826 1.000
1.000 1.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

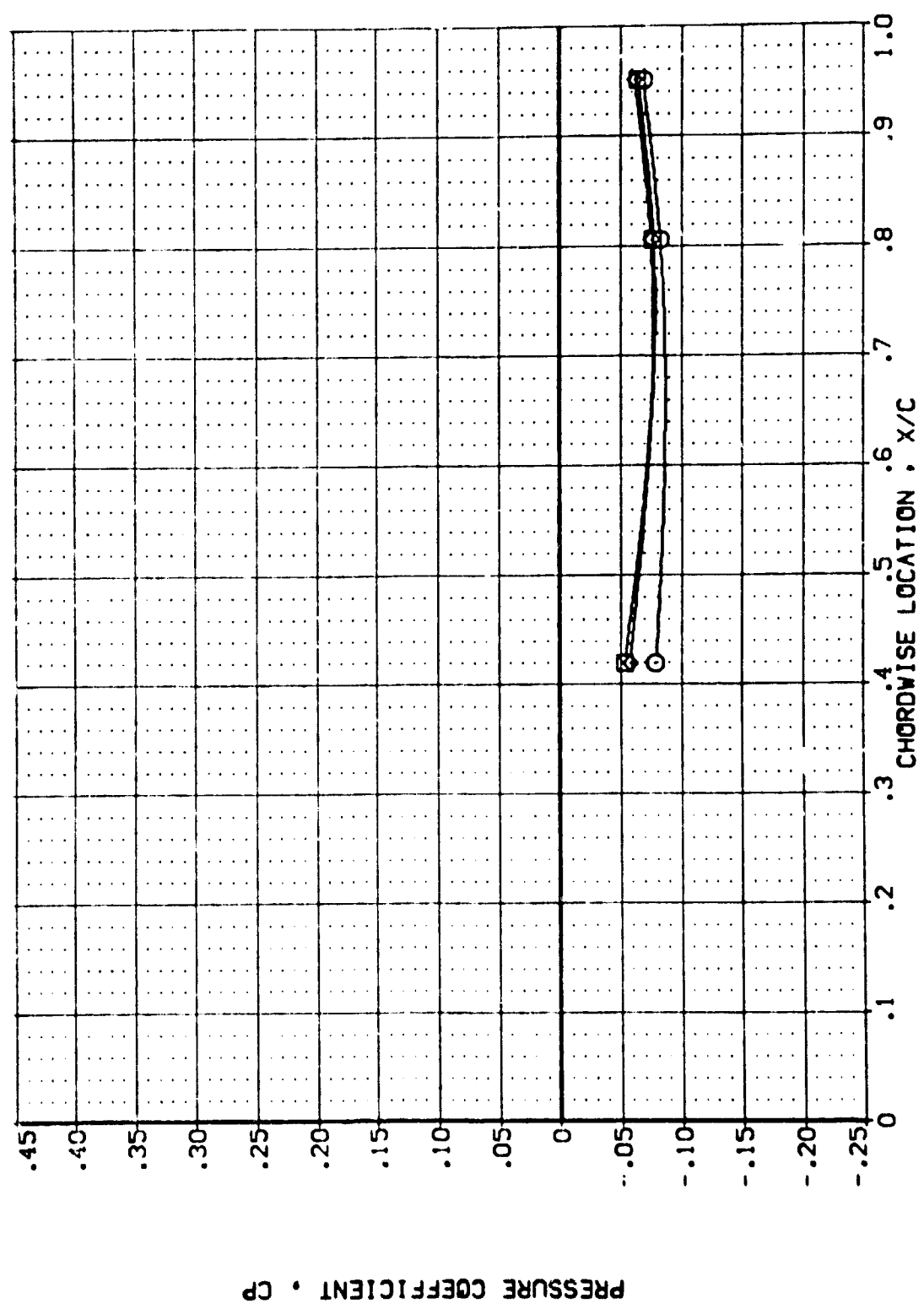
MACH = 3.500 ALPHA = .000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/P/R GIMBAL

(UBZ046) AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 23.860 .826 1.000

(UBZ050) AVES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE 1.000 1.000

(UBZ131) AVES 87-710 1A12C 01 T1 S1 H-3.5 PLUM UP WING P/S 1.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

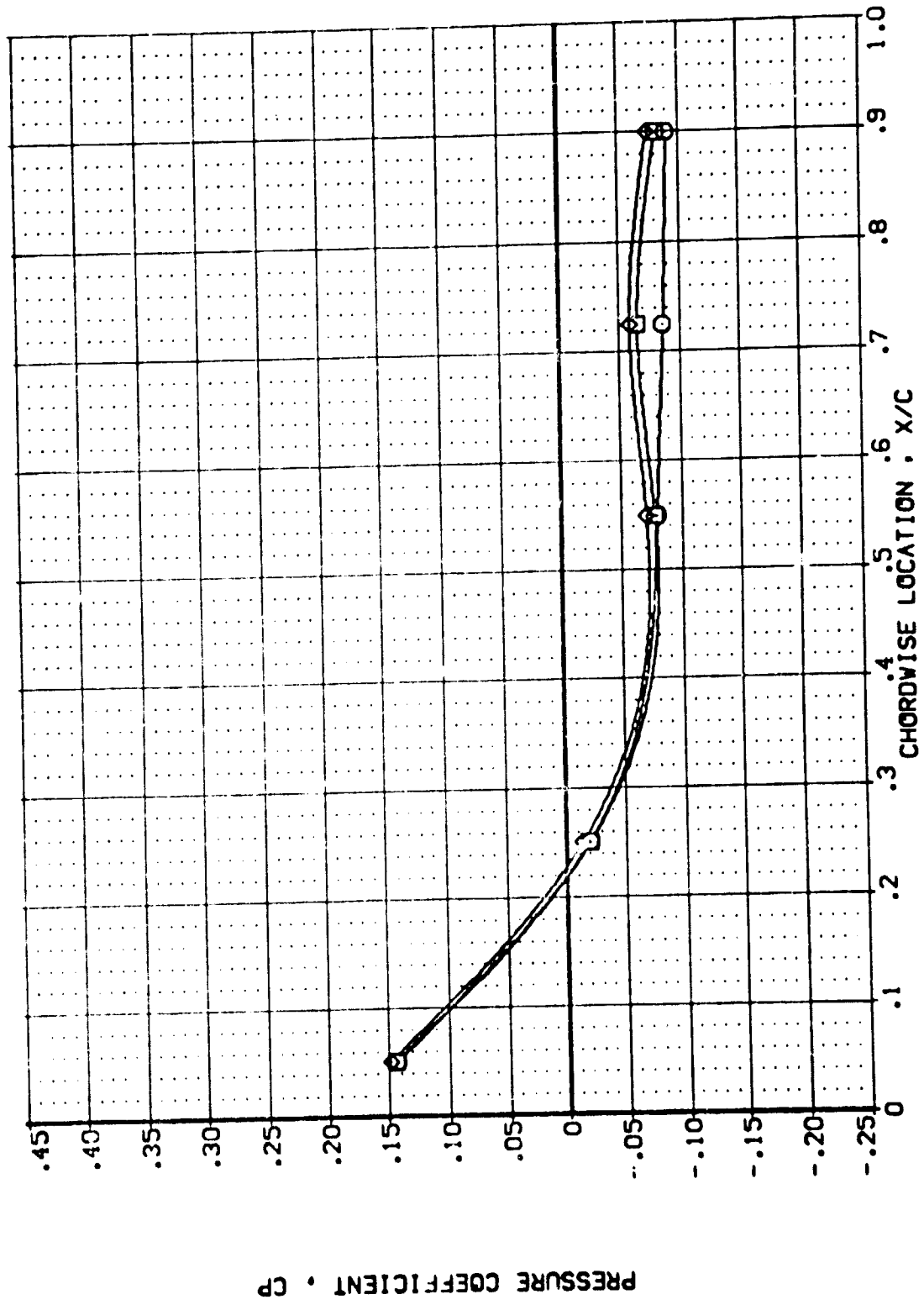
MACH = 3.500 ALPHA = .000 Y/B = .427 PAGE 710

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CPR SPMR GIMBAL

(UB2046) ANES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 23.8650 1.000 1.000

(UB2050) ANES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE 1.000 .826 1.000

(UB2131) ANES 87-710 1A12C 01 T1 S1 H-3.5 PLUS UP WING PMS .000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

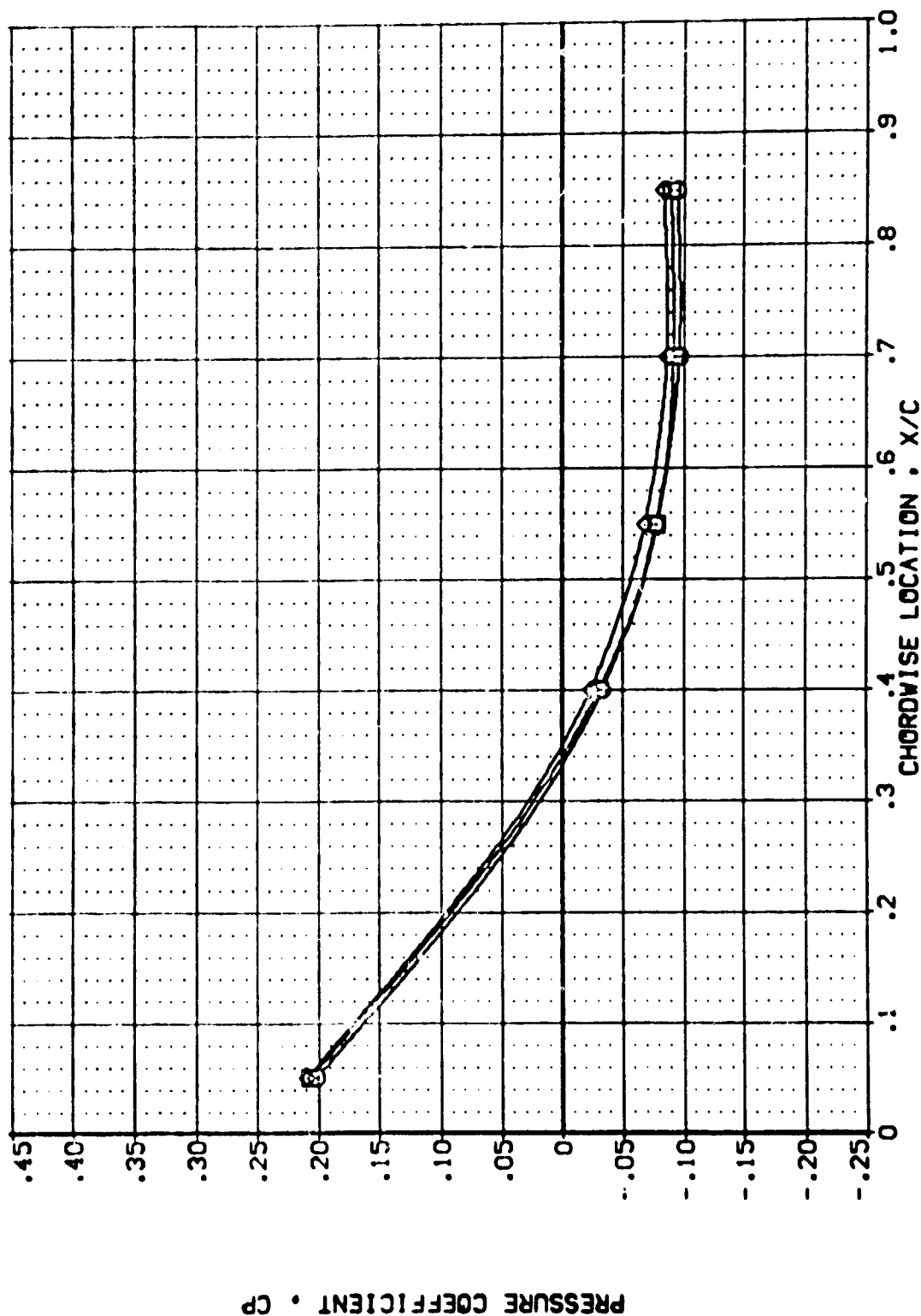
MACH = 3.500 ALPHA = .000 Y/B = .534 PAGE 711

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C-R STPR GIMBAL

(UBZ046) AMES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 1.000

(UBZ050) AMES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE 1.000 .826

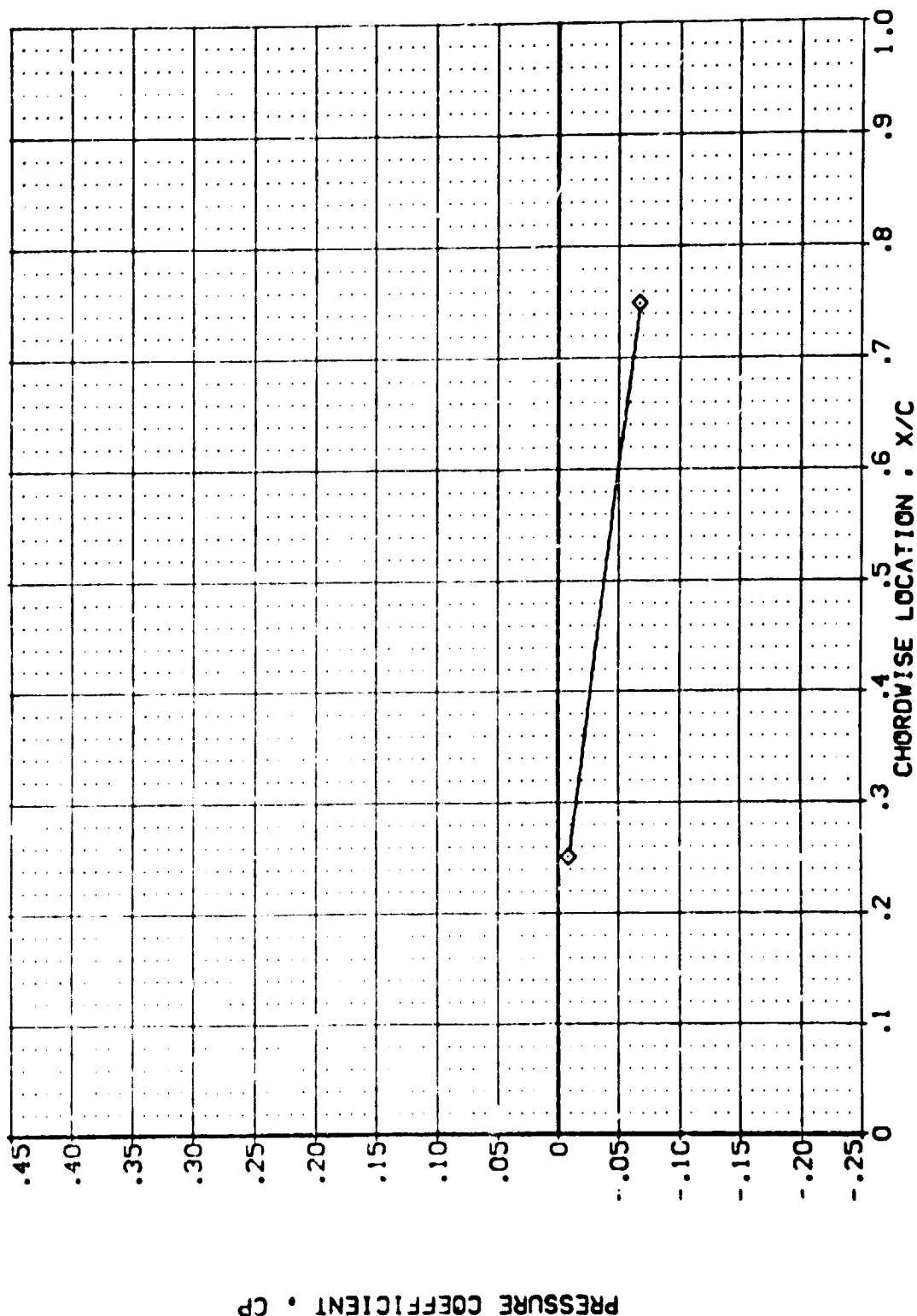
(UBZ131) AMES 87-710 1A12C 01 T1 S1 M-3.5 PLUS UP WING PRES .000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .673 PAGE 712

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/PR S/PFR G/INBAL
 (UB2046) AYES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 1.000
 (UB2050) AYES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE 1.000 .826
 (UB2131) AYES 87-710 1A12C 01 T1 S1 M-3.5 PLUS UP WING PHS 1.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .780 PAGE 713

DATA SET SYMBOL: (UBZ046) (UBZ050) (UBZ131)

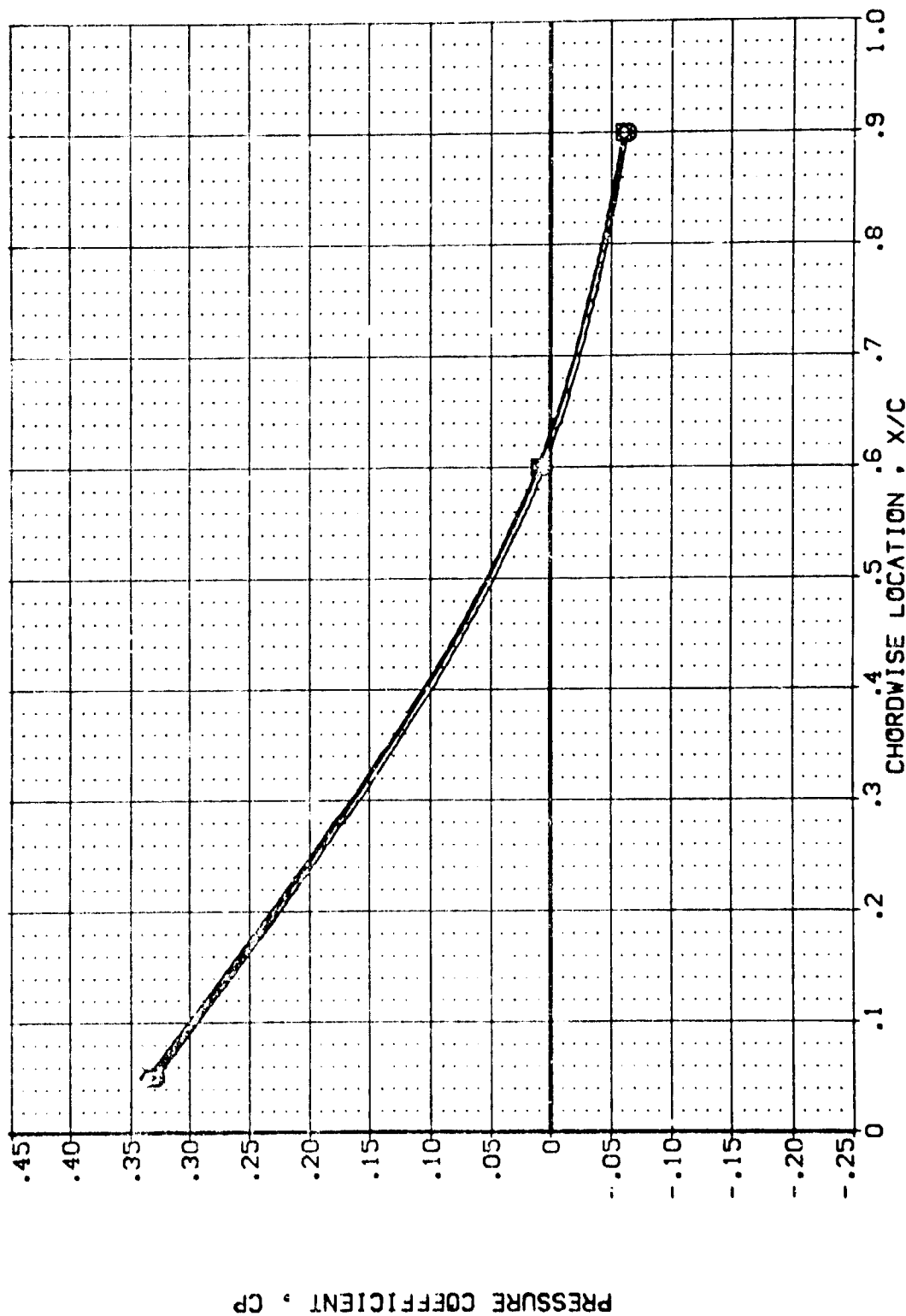
CONFIGURATION DESCRIPTION: AYES 67-710 IAI2C 01 T1 S1 UPPER WING PRESSURE AYES 67-710 IAI2C 01 T1 S1 UPPER WING PRESSURE AYES 67-710 IAI2C 01 T1 S1 M-3.5 PLUMS UP WING PHS

POWER: .000 .000 .000

CFR: 23.860

SR-PR: .826

GIMBAL: 1.000 1.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = .000 Y/B = .887

PAGE 714

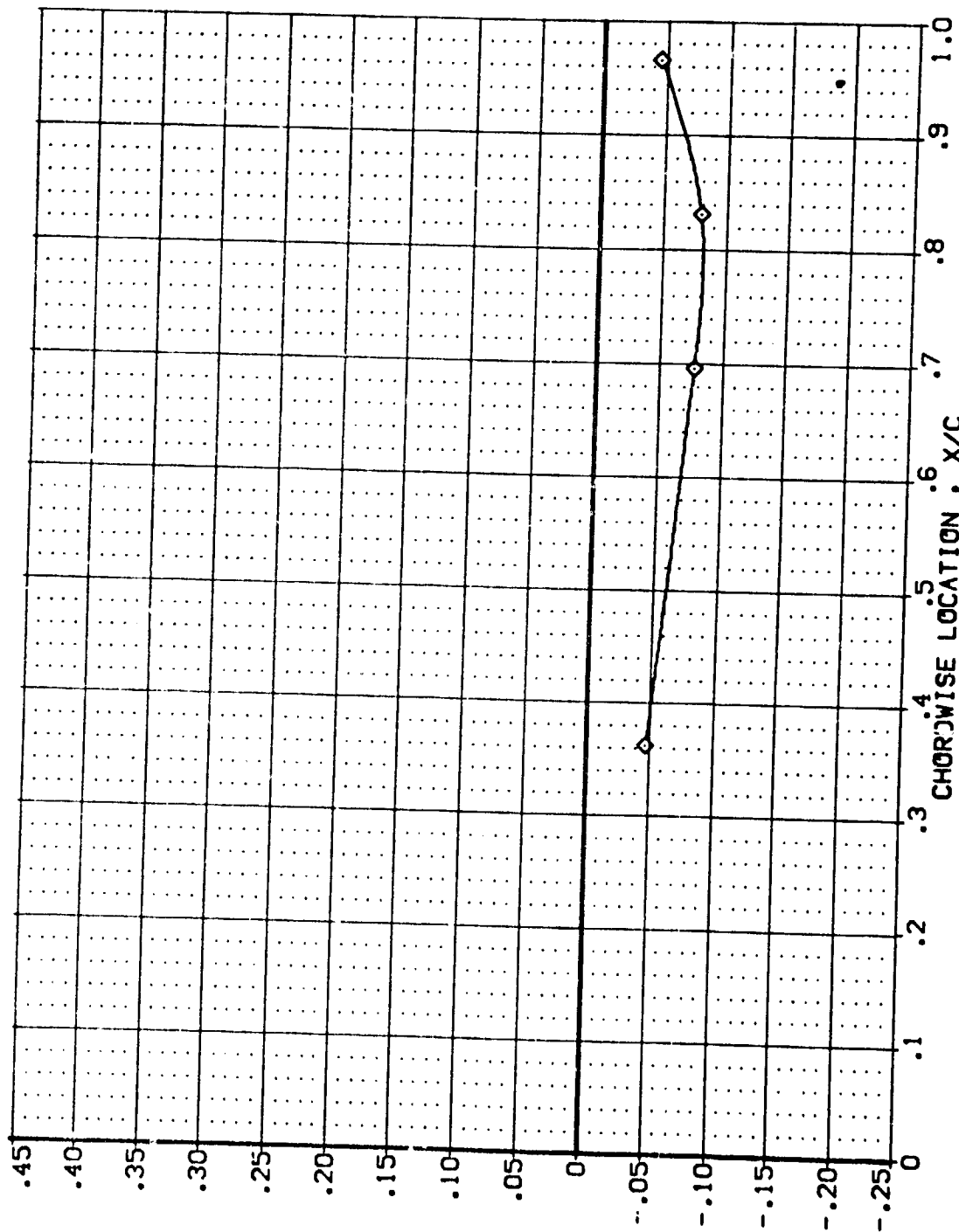
DATA SET SYMBOL

(UBZ046)
(UBZ050)
(UBZ131)

CONFIGURATION DESCRIPTION

AVES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IALZC 01 T1 S1 UPPER WING PRESSURE
AVES 87-710 IALZC 01 T1 S1 M-3.5 PLUS UP WING PDS

POWER 0.000
DPR 23.860
SNAPR .826
GIMBAL 1.000
1.000
1.000



PRESSURE COEFFICIENT, CP

CHORDWISE LOCATION, X/C

EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

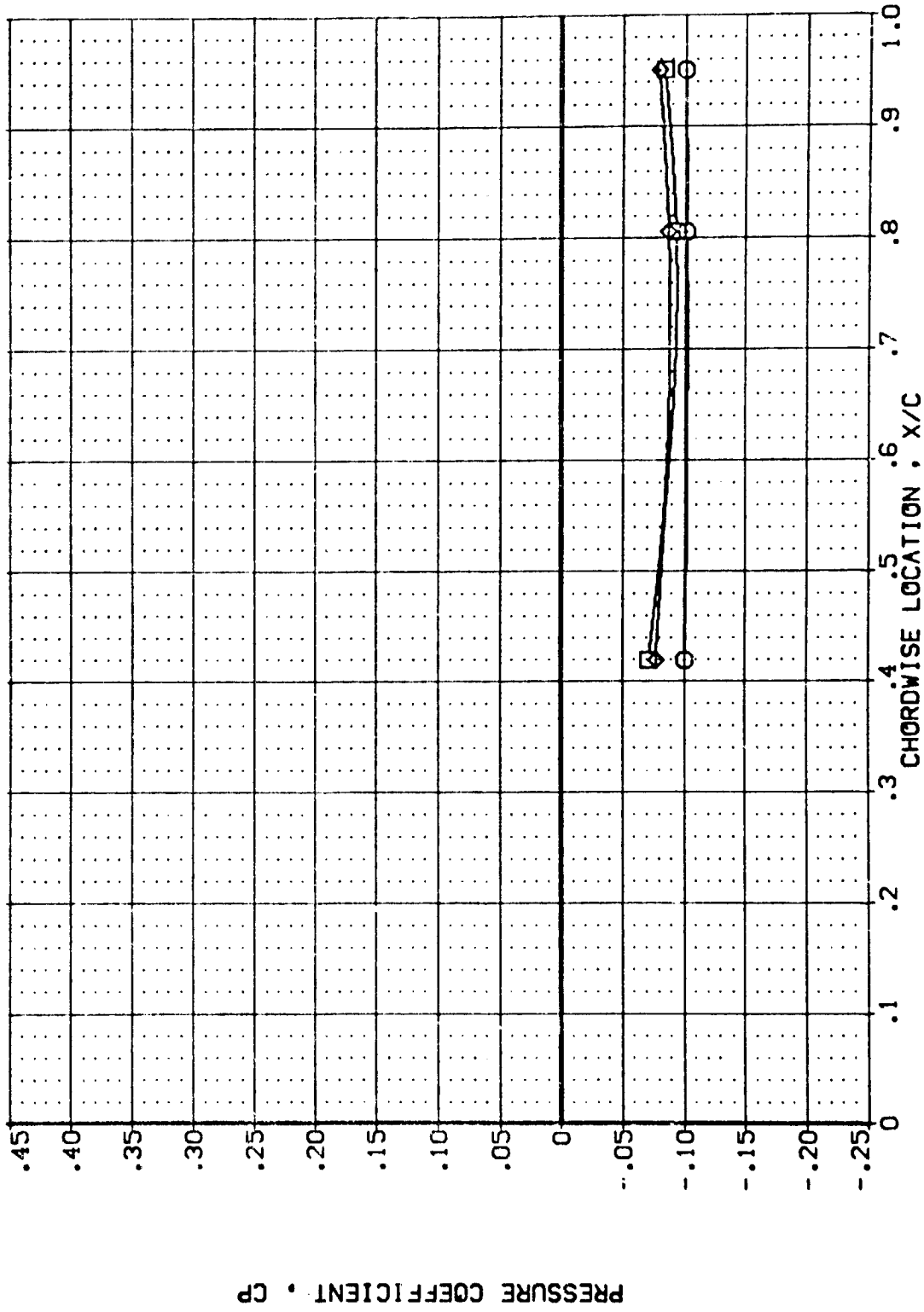
MACH = 3.500 ALPHA = 8.000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER DFR SR-PR GIMBAL

(UBZ046) AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 23.860 1.000

(UBZ050) AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE 1.000 .825 1.000

(UBZ131) AMES 87-710 IAI2C 01 T1 S1 H-3.5 PLUS UP WING PRS .070 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

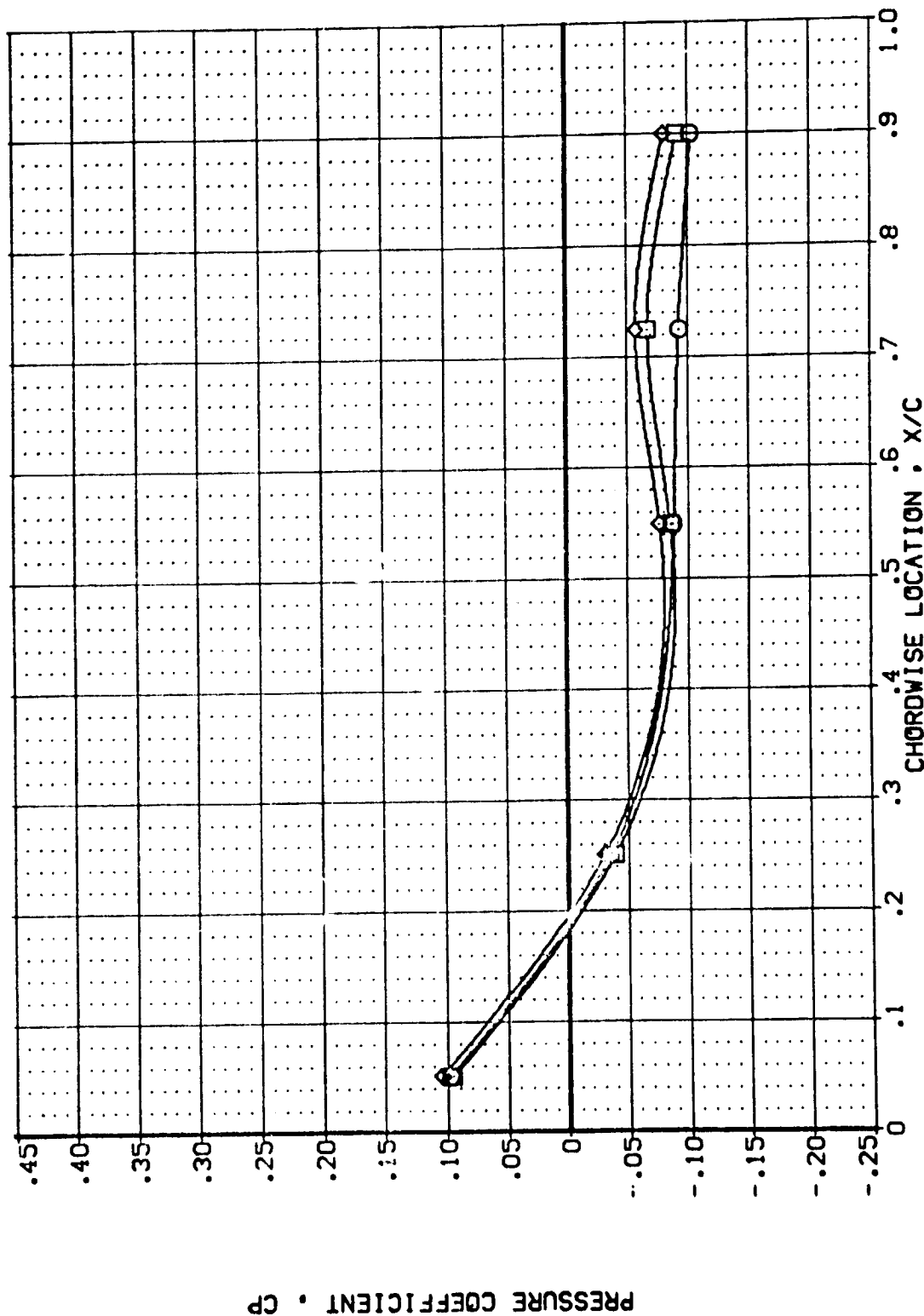
MACH = 3.500 ALPHA = 8.000 Y/B = .427 PAGE 716

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/PFR G/HBAL

(LBZ046) AHES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 23.860 1.000

(LBZ050) AHES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE 1.000 .826 1.000

(LBZ131) AHES 87-710 IAI2C 01 T1 S1 H-3.5 PLUS UP WING PRS 1.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

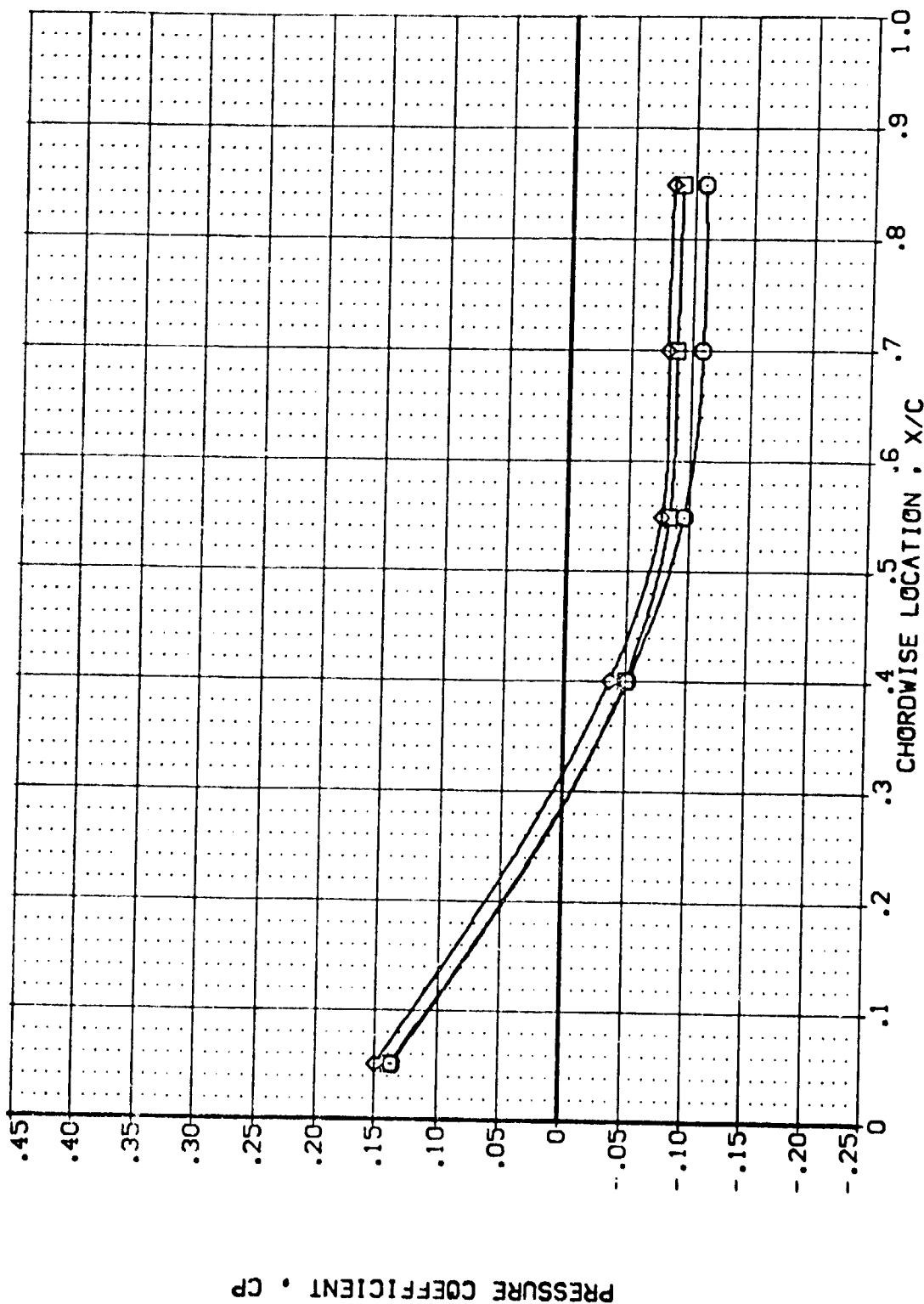
MACH = 3.500 ALPHA = 8.000 Y/B = .534 PAGE 717

DATA SET SYMBOL
(LBZ046)
(LBZ050)
(LBZ131)

CONFIGURATION DESCRIPTION

AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 H-3.5 PLUS UP WING PMS

POWER GPR SR-PR GIMBAL
.000 .826 1.000
1.000 1.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

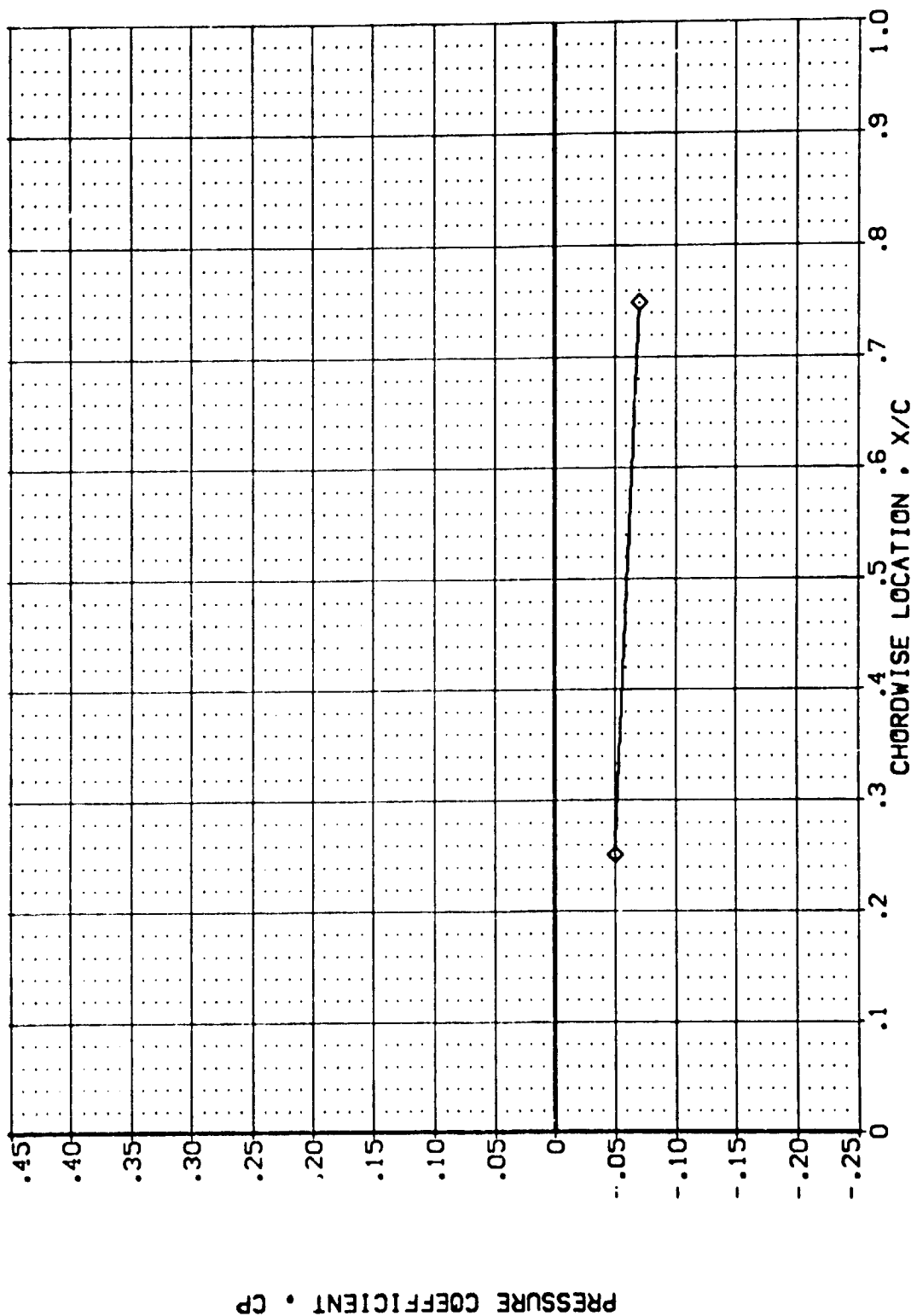
MACH = 3.500 ALPHA = 8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/PR S/PWR GIMBAL

(UB2046) AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE .000 1.000

(UB2050) AMES 87-710 IAI2C 01 T1 S1 UPPER WING PRESSURE 1.000 .826

(UB2131) AMES 87-710 IAI2C 01 T1 S1 M-3.5 PLUGS UP WING PWS 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

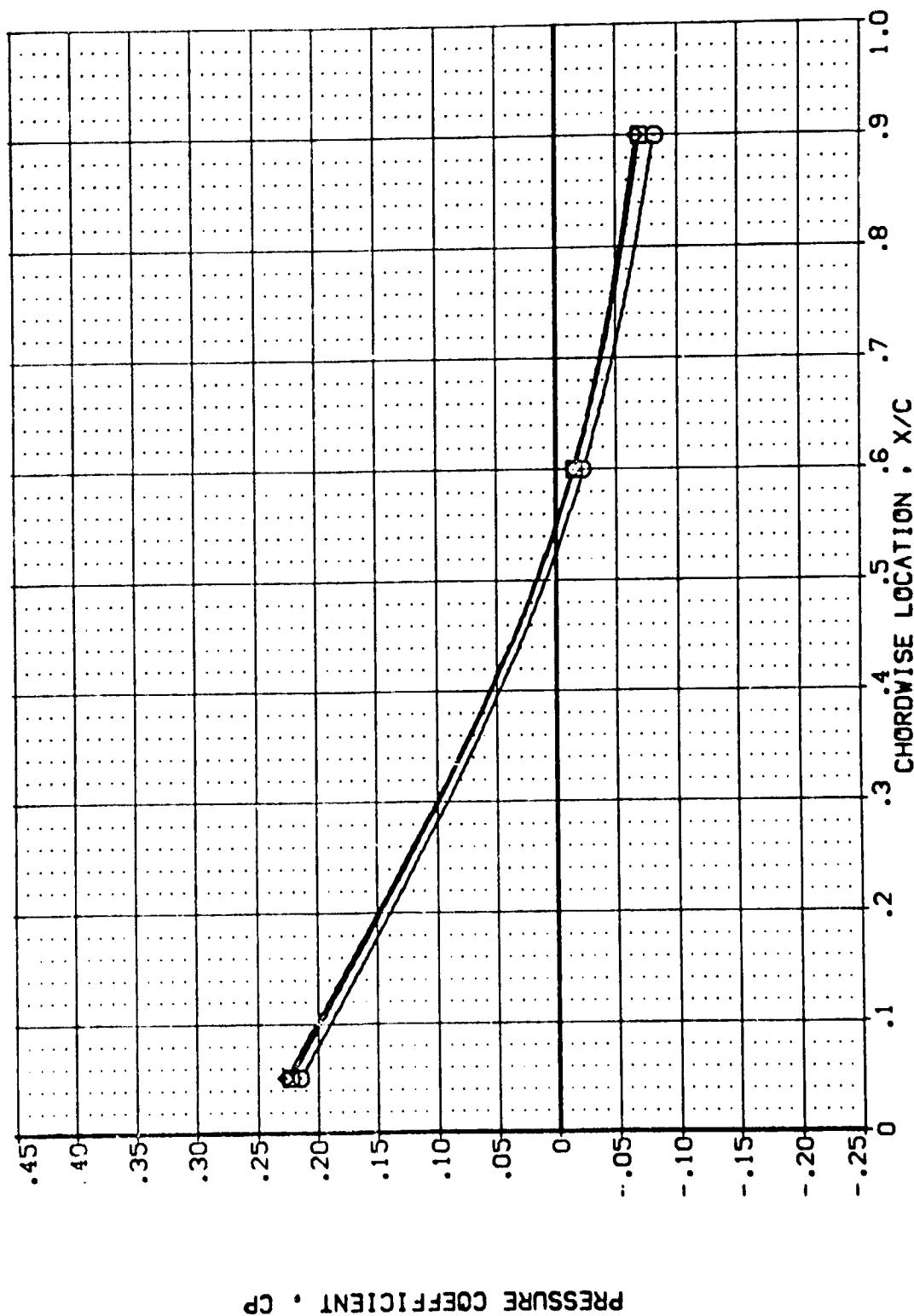
MACH = 3.500 ALPHA = 8.000 Y/B = .780 PAGE 719

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/PR S/PFR GIMBAL

(UBZ046) AMES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE .000 23.860 1.000

(UBZ050) AMES 87-710 1A12C 01 T1 S1 UPPER WING PRESSURE 1.000 .826 1.000

(UBZ131) AMES 87-710 1A12C 01 T1 S1 M-3.5 PLUS UP WING PRS .000 1.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING TOP

MACH = 3.500 ALPHA = 8.000 Y/B = .887

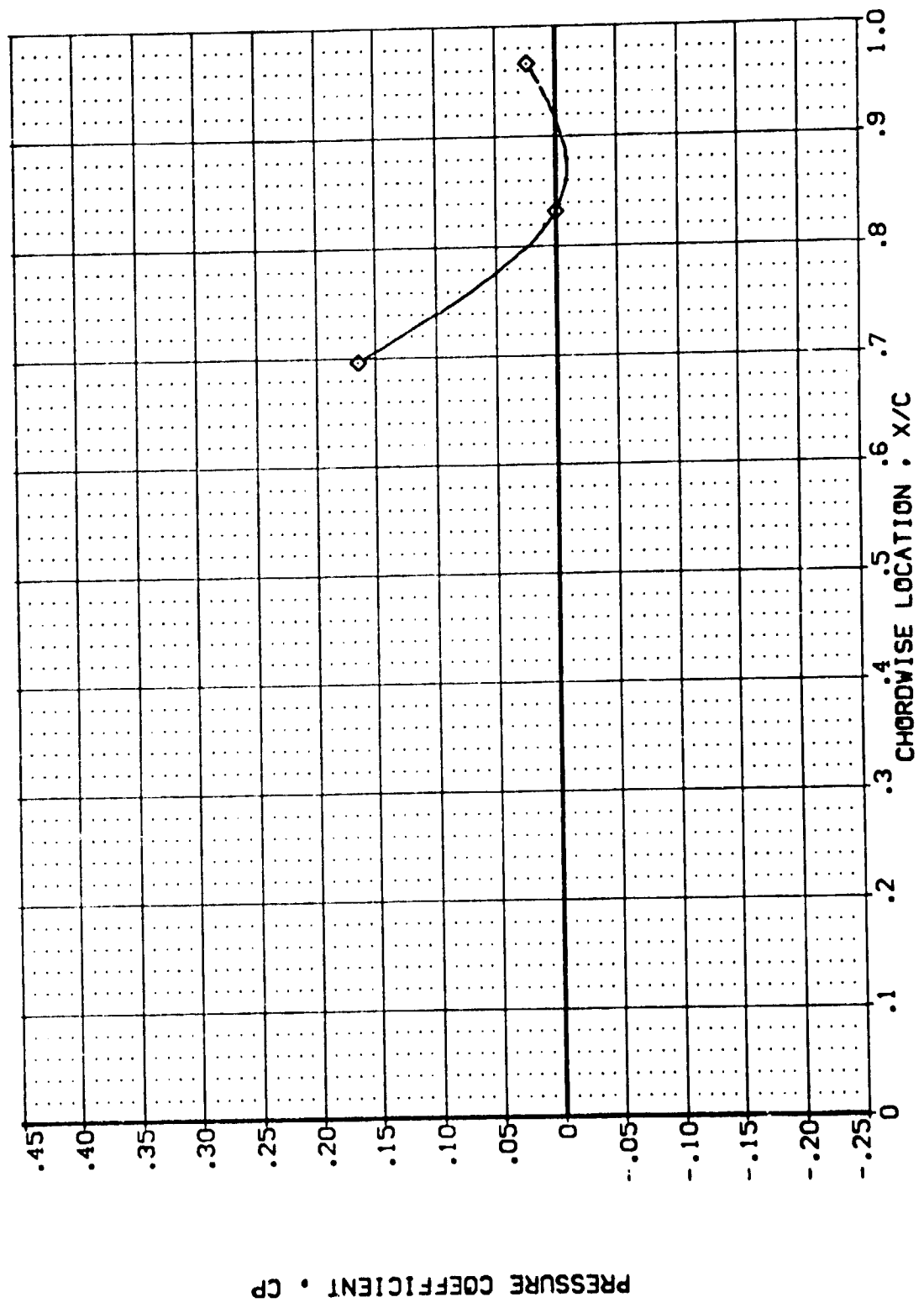
PAGE 720

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER DFR SWPR GIMBAL

(LBZ008) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE .000 26.860 1.000

(LBZ041) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 .768 1.000

(LBZ128) AYES 87-710 1A12C 01 T1 S1 H-3.5 PLUS LG WING PPS .000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

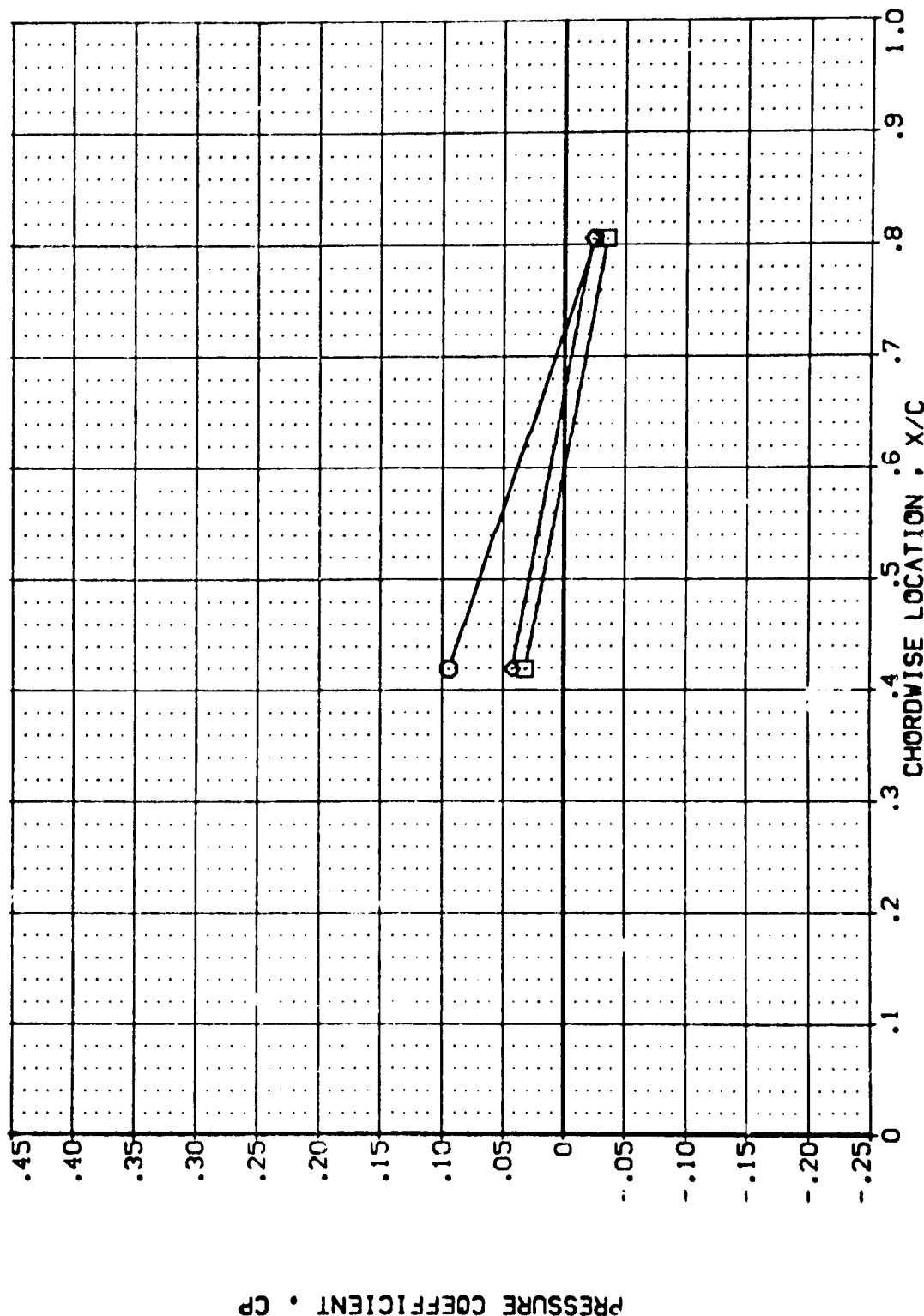
MACH = 3.000 ALPHA = -8.000 Y/B = .299 PAGE 721

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CPR SWPR Q INBAL

(LB2038) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 .000 .000

(LB2041) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 26.860 .768

(LB2128) ASES 87-710 IAI2C 01 T1 S1 M-3.5 PLUS LG WING PRS .000 .000 .000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .427

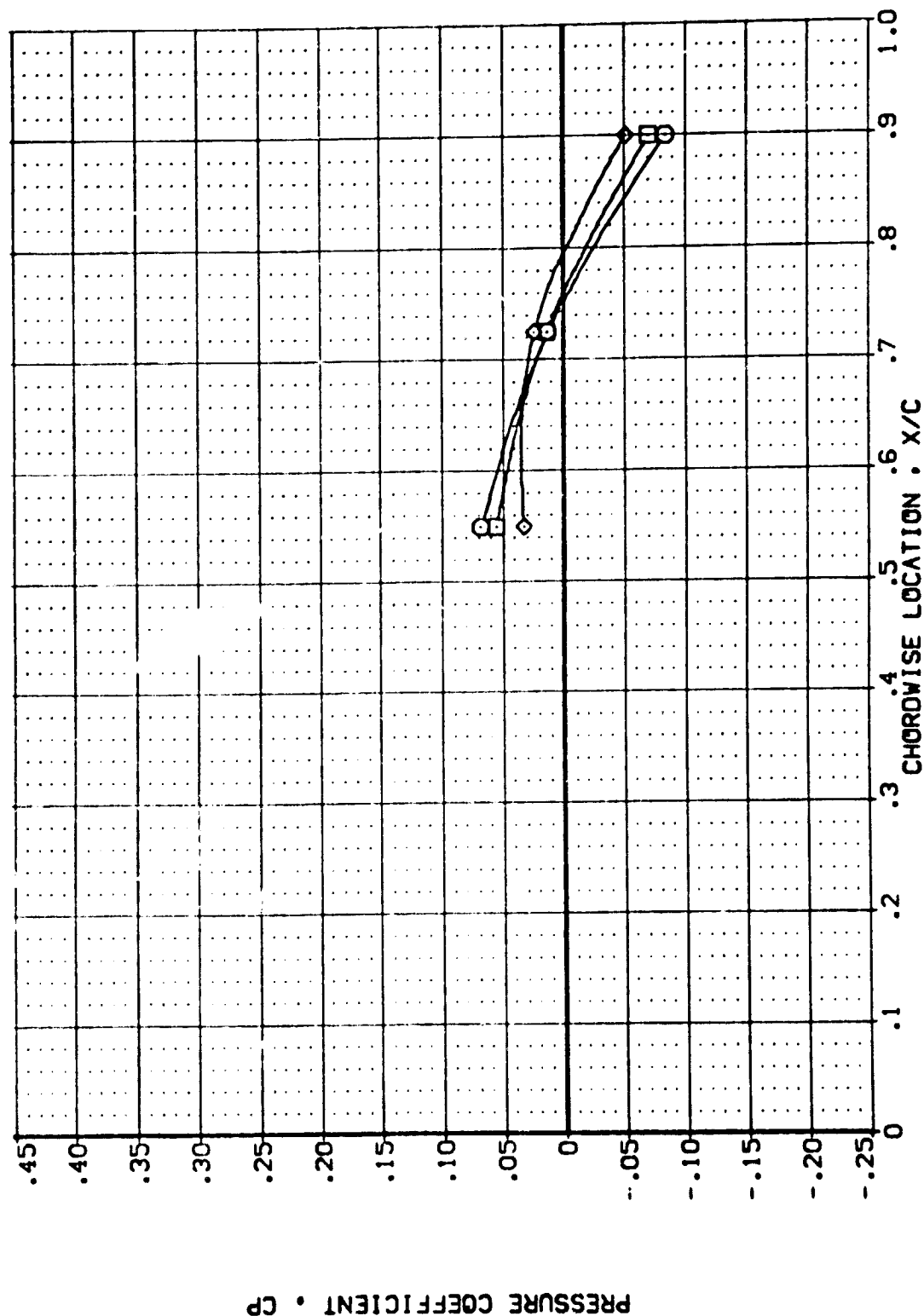
PAGE 722

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CRR SRRR GIMBAL

(LBZ038) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 1.000

(LBZ041) AYES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 .768 1.000

(LBZ129) AYES 87-710 IAI2C 01 T1 S1 M-3.5 PLUS LO WING PRS 1.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .534 PAGE 723

(LBA0028)
(LBA041)
(LBA128)

CONFIGURATION DESCRIPTION

AMES 87-710 1A12C 01 T1 S1 LOWER VING PRESSURE
AMES 87-710 1A12C 01 T1 S1 LOWER VING PRESSURE
AMES 87-710 1A12C 01 T1 S1 #3.5 PLUS LONG PMS

100

888
-1

8

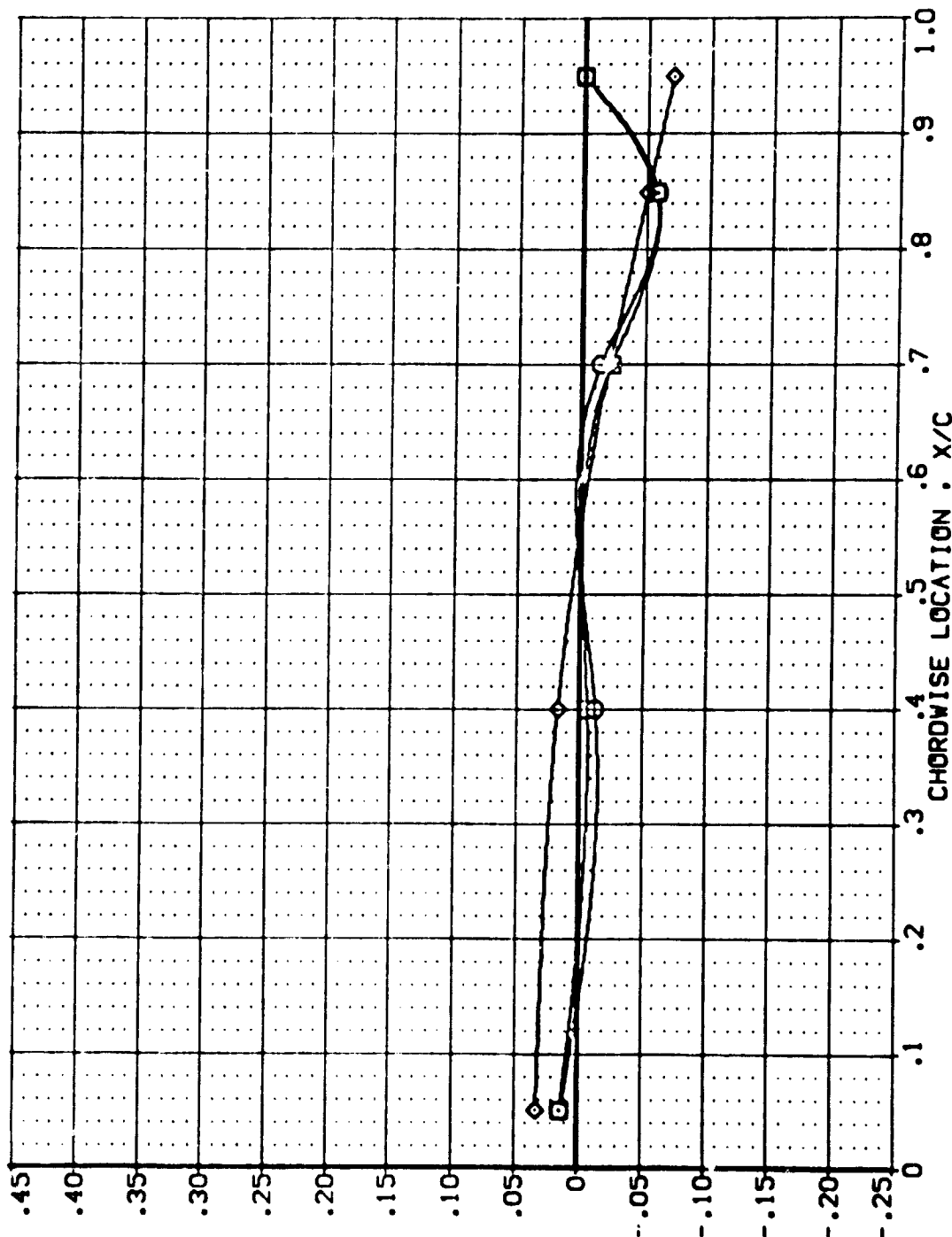
26.880

85

Bel.

FILE

1.000
1.000
1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

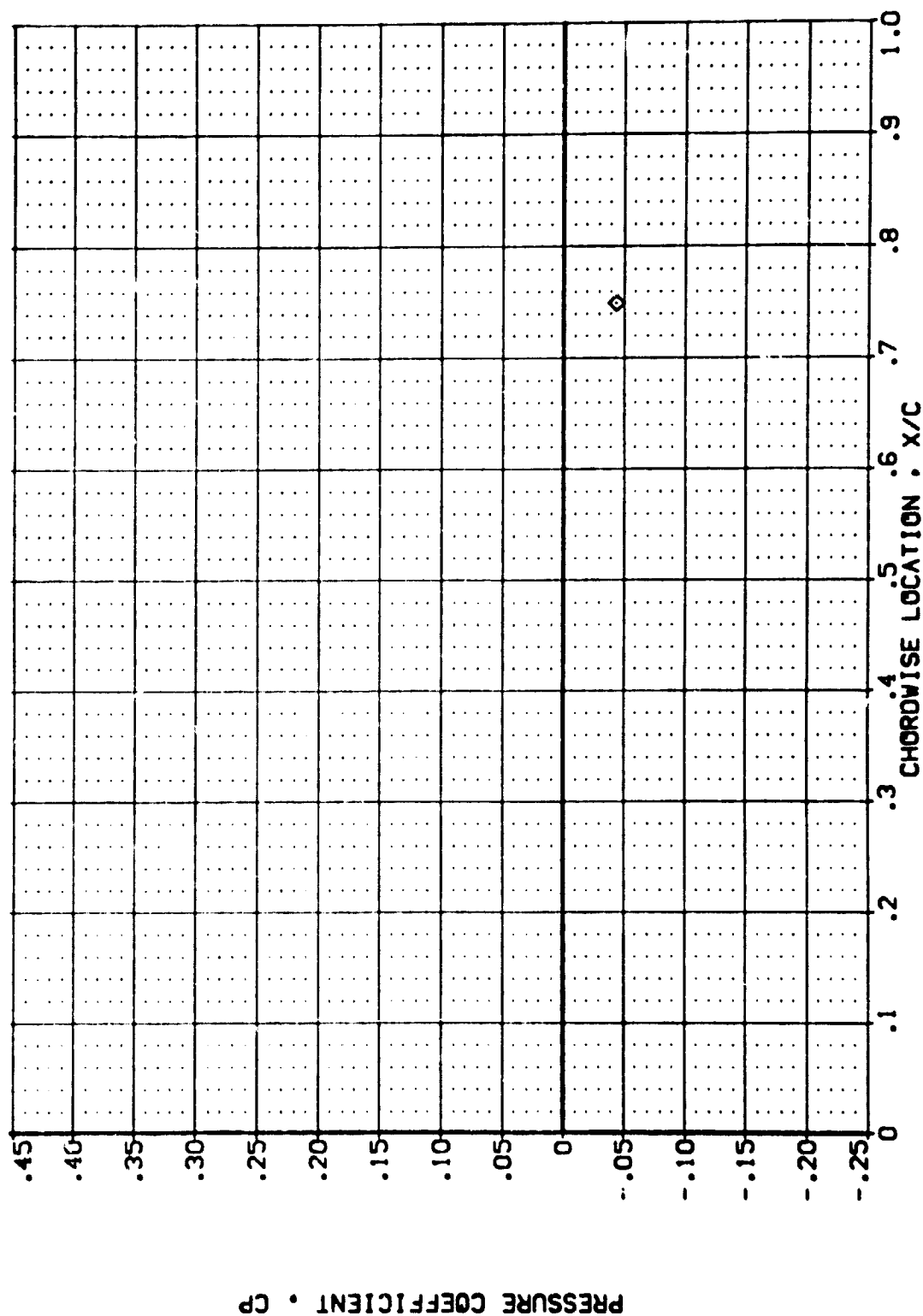
MACH	=	3.000	ALPHA	=	-8.000	Y/B	=	.673
------	---	-------	-------	---	--------	-----	---	------

PAGE 724

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ008) APES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ041) APES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
 (LBZ128) APES 87-710 1A12C 01 T1 S1 H-3.5 PUMS LG V/G PRS

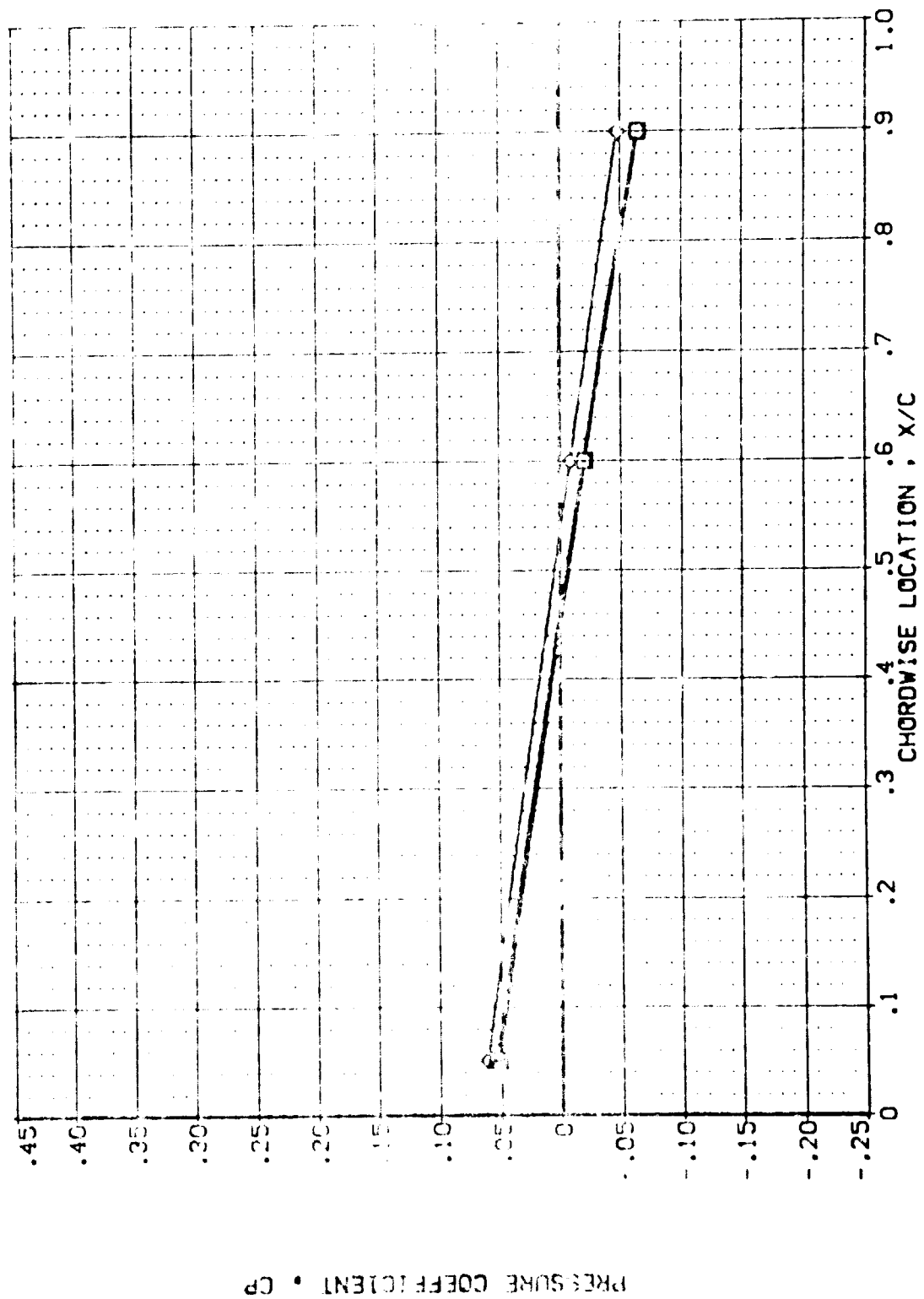
POWER DFR SNRPR GIMBAL
 .000
 26.860 .768
 1.000 1.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER L/R SRS N G/P/SAL
 (LB7034) 0 AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 0.000 1.000
 (LB7041) 0 AMES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 0.000 1.000
 (LB7128) 0 AMES 87-710 1A12C 01 T1 S1 H-3.5 PLUS LG WING PRES 1.000 0.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = -8.000 Y/B = .887 PAGE 726

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LB0008)
(LB0041)
(LB0128)

AWES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AWES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AWES 87-710 1A12C 01 T1 S1 H-3.5 PLUS LG WING PRES

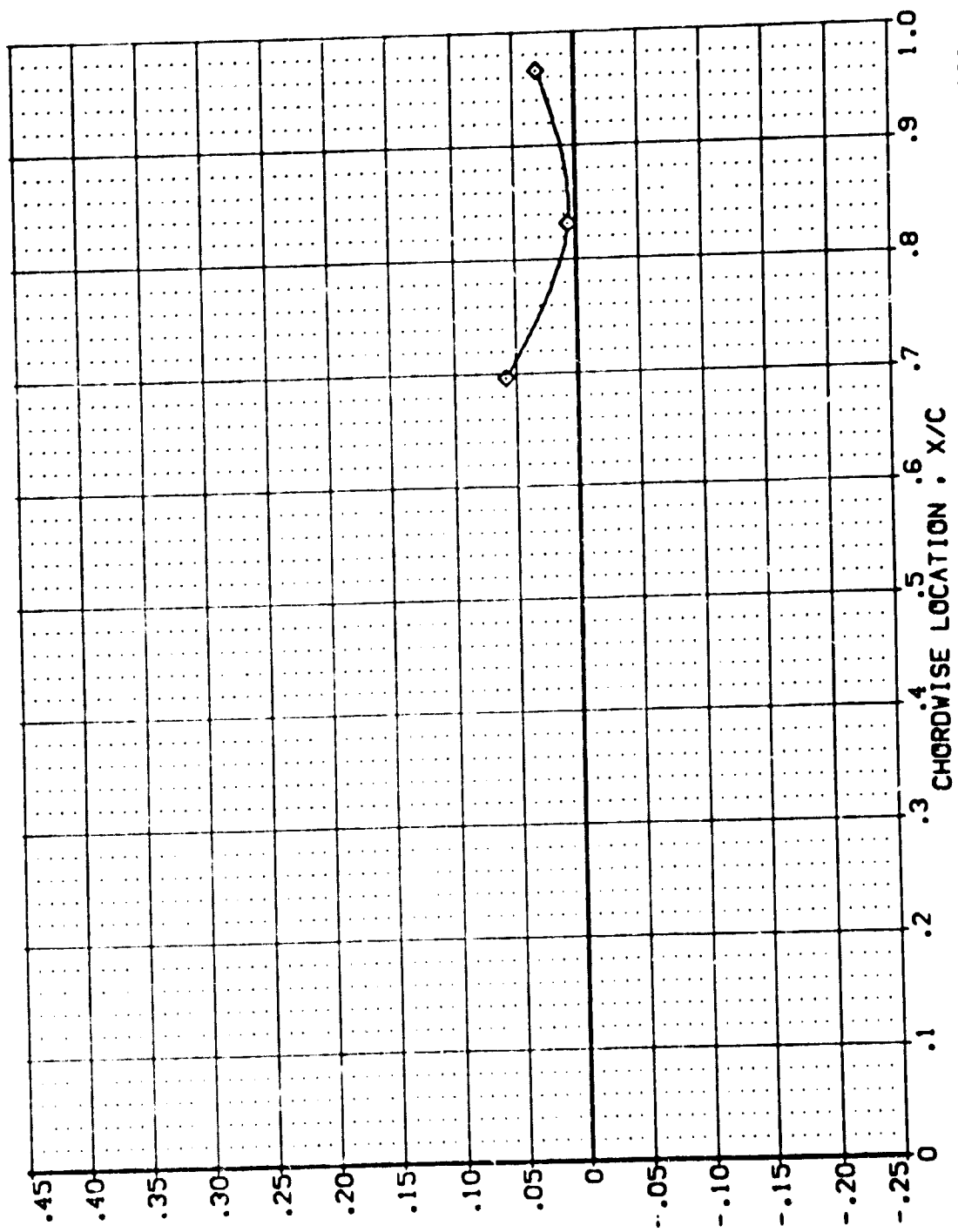
POWER 0.000
0.000
1.000

CFR 26.860
26.860
26.860

SWPR 0.768
0.768
0.768

SIGNAL 1.000
1.000
1.000

PRESSURE COEFFICIENT - CP



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

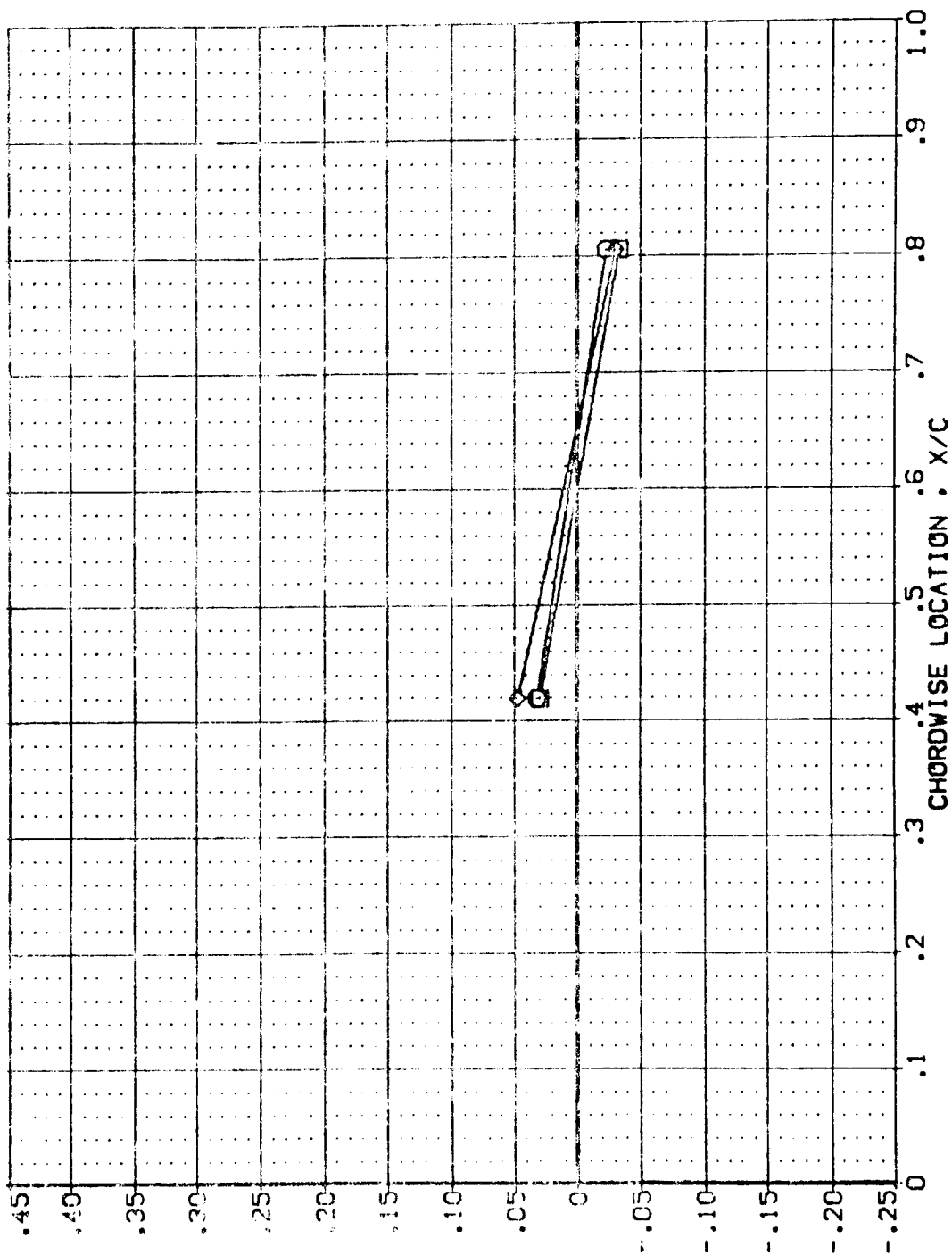
MACH = 3.000 ALPHA = .000 Y/B = .299

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CMR STARR GIMBAL

(LBZ038) AMES 87-710 1A12C 01 11 SI LOWER WING PRESSURE 1.000 1.000 1.000

(LBZ041) AMES 87-710 1A12C 01 11 SI LOWER WING PRESSURE 1.000 1.000 1.000

(LBZ123) AMES 87-710 1A12C 01 11 SI 14-3.5 PLUS LG WING PRS 1.000 1.000 1.000



PRESSURE COEFFICIENT • CP

EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .427

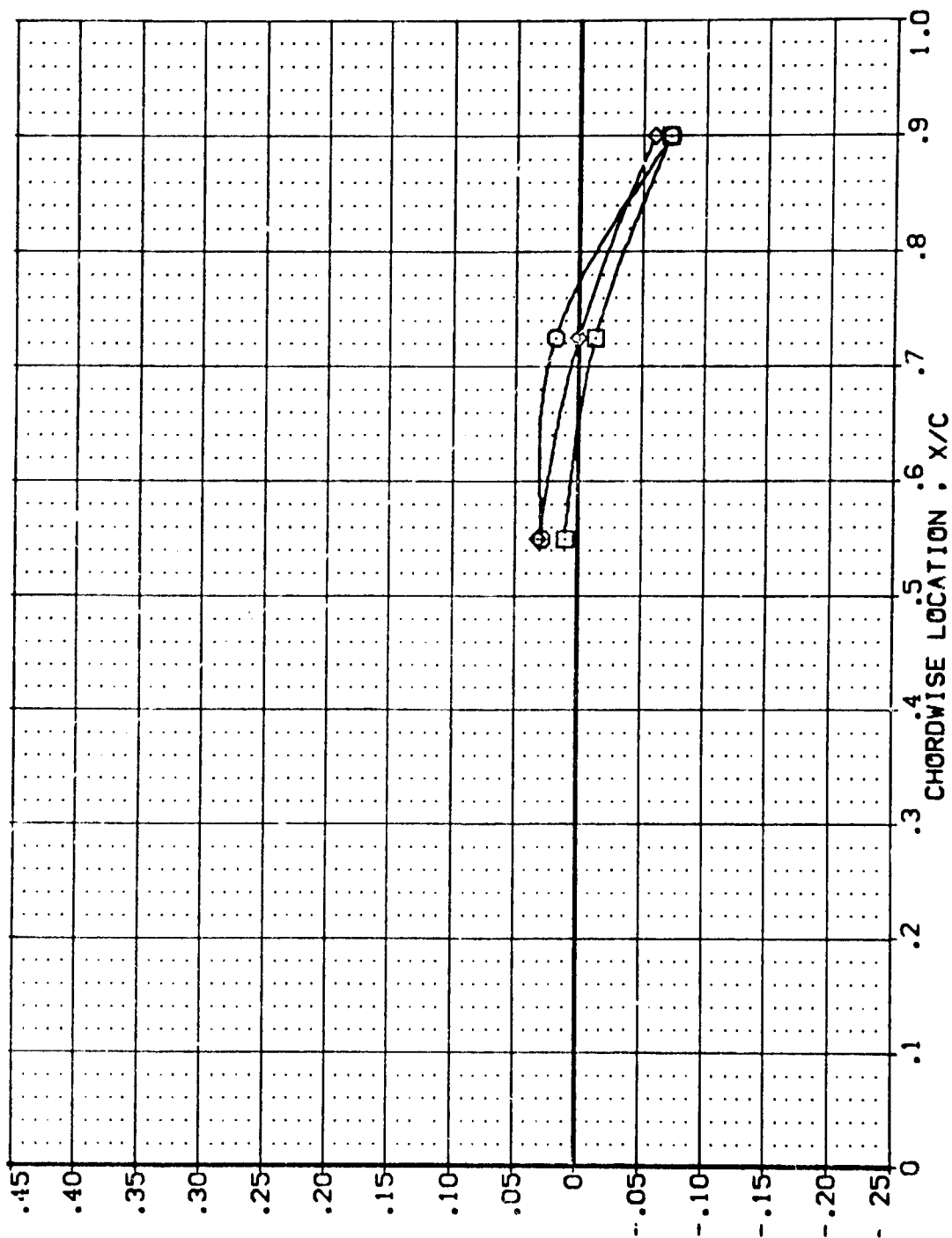
PAGE 728

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ0038)
(LBZ041)
(LBZ128)

AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 N-3.5 PLUS LG WING PRS

POWER 0.000 26.860 1.000
SOPR .768
GIMBAL 1.000 1.000 1.000



PRESSURE COEFFICIENT, CP

EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

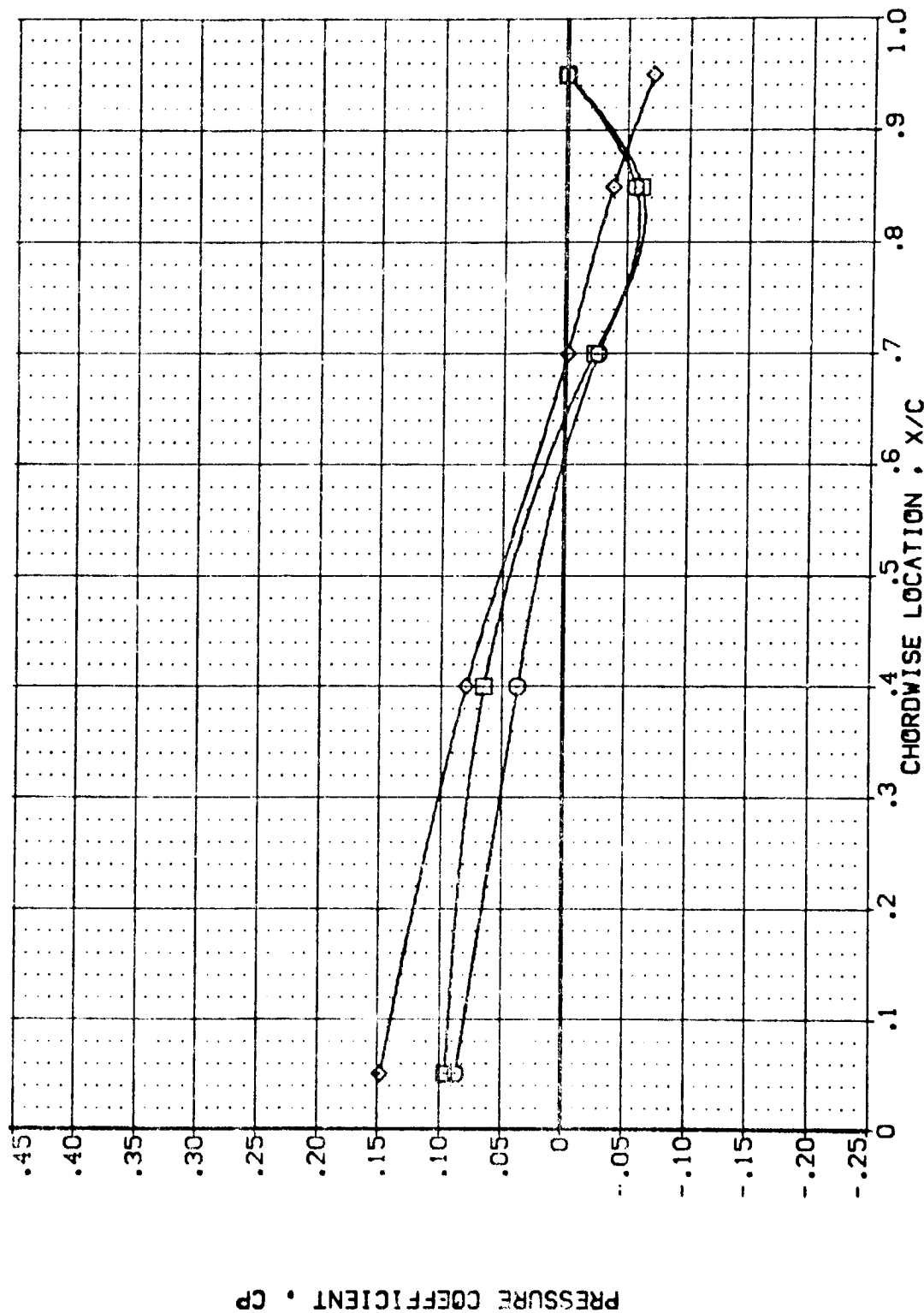
MACH = 3.000 ALPHA = .000 Y/B = .534

UNIT 3.1 SYMBOL

(LBZ038)
(LBZ041)
(LBZ128)

CONFIGURATION DESCRIPTION
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 H-3.5 PLUS LO WING PPS

POWER LWR SW-PR GIMBAL
.000 .000
1.000 1.000
1.000 1.000



PRESSURE COEFFICIENT, CP

CHORDWISE LOCATION, X/C

EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

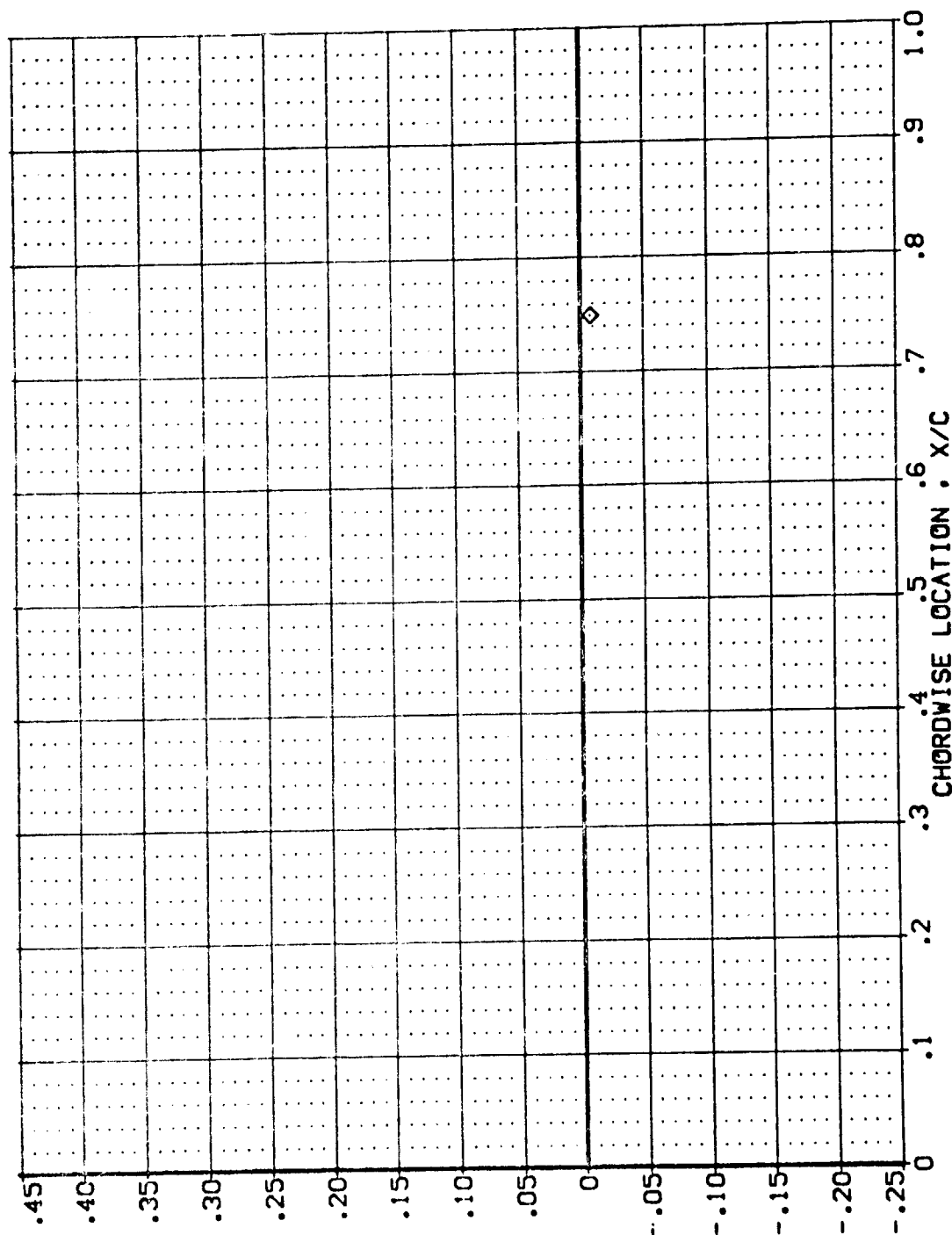
MACH = 3.000 ALPHA = .000 Y/B = .673 PAGE 730

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P C/PFR GIMBAL

(LBZ038) AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE .000 26 860 1.000

(LBZ041) AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 .768 1.000

(LBZ128) AVES 87-710 1A12C 01 T1 S1 H-3.5 PLUS LG WING PRS .000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

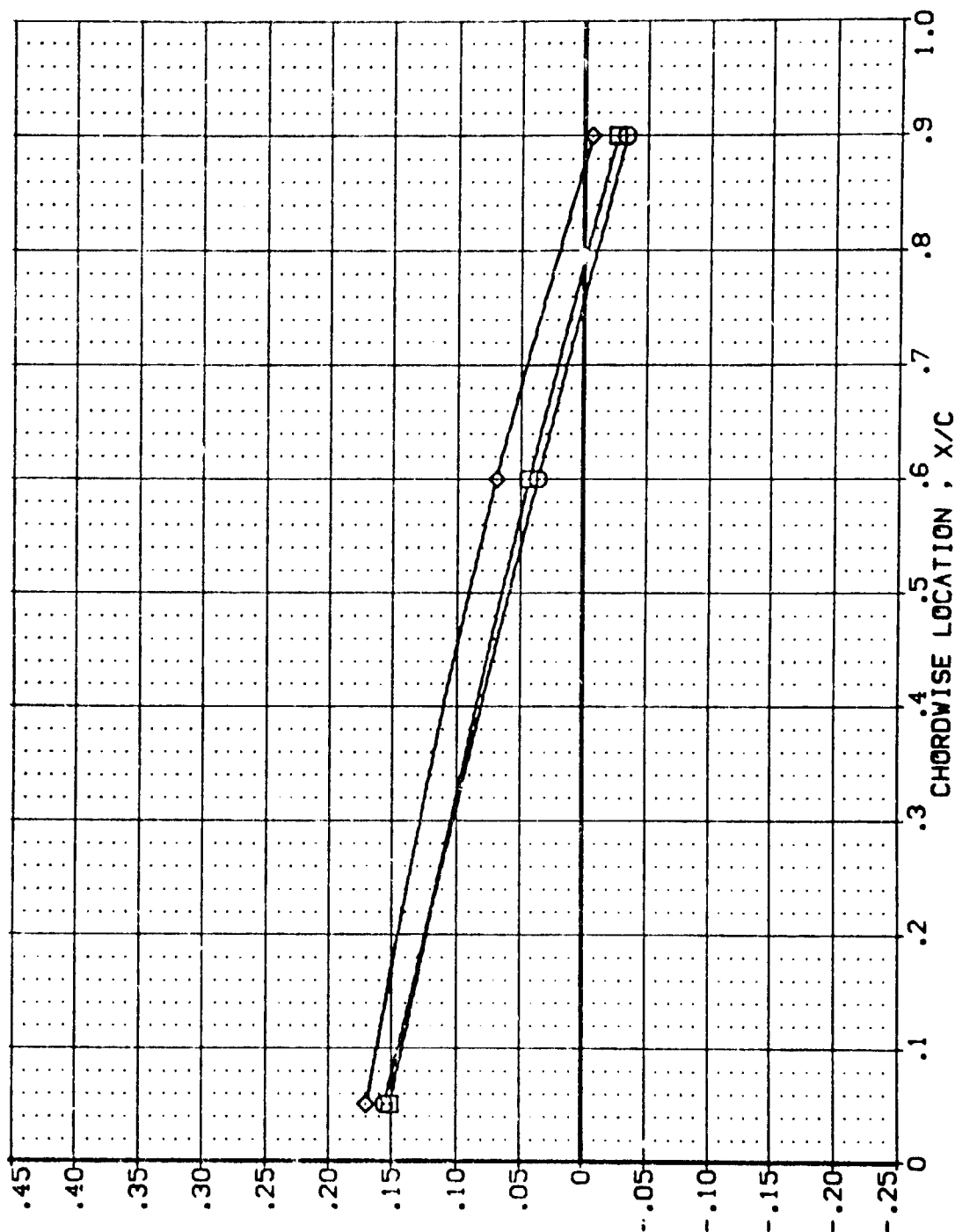
MACH = 3.000 ALPHA = .000 Y/B = .780 PAGE 731

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LBZ038)
(LBZ041)
(LBZ128)

AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 H-3.5 PLUS LO WING PRS

POWER 0.000 25.360 1.000
SWPR 1.000 1.000 1.000
GIMBAL 1.000 1.000 1.000



PRESSURE COEFFICIENT • CP

EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = .000 Y/B = .887

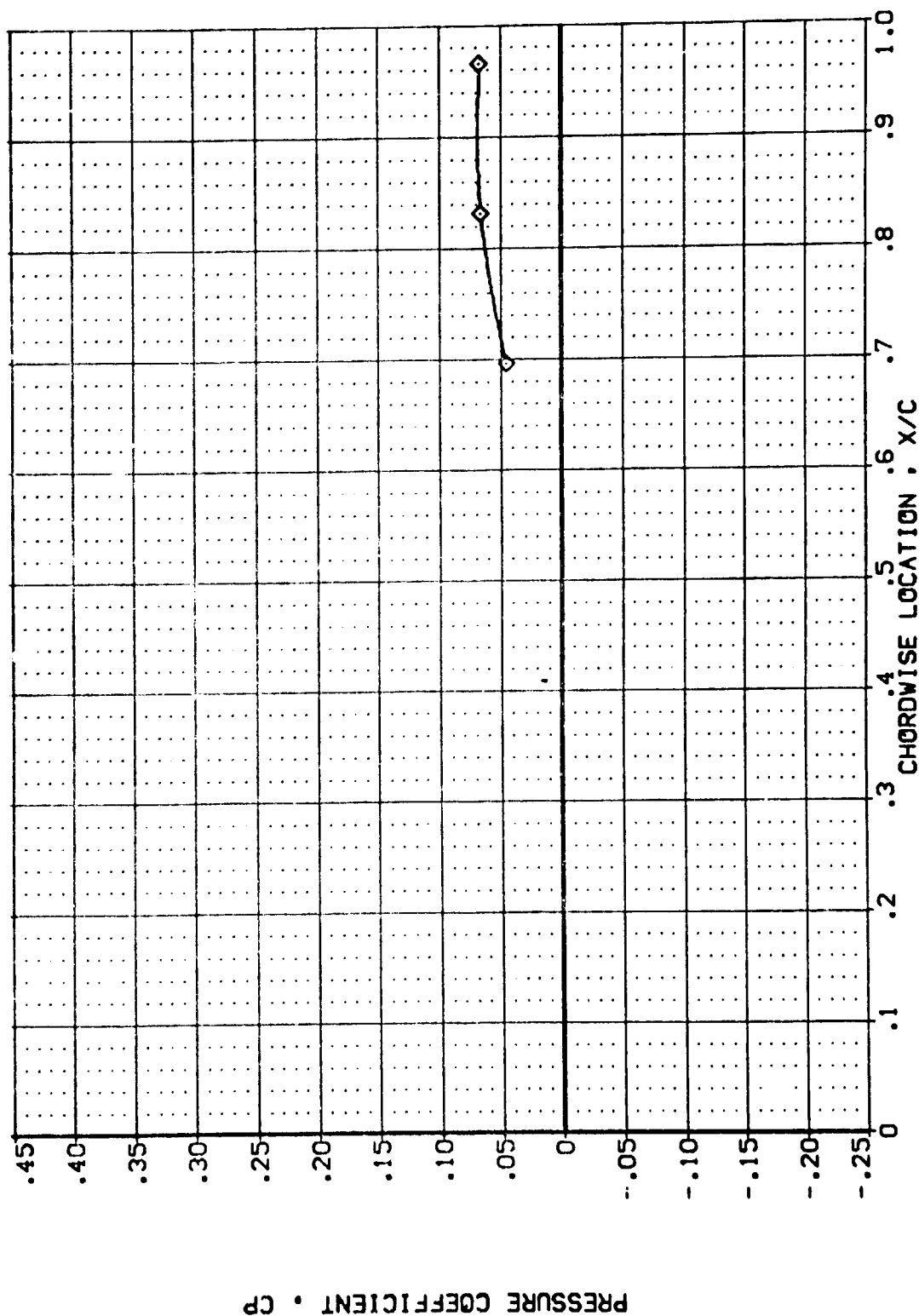
PAGE 732

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER SFR GINBAL

(LBZ008) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 .000 1.000

(LBZ041) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 .768 1.000

(LBZ128) ASES 87-710 IAI2C 01 T1 S1 M-3.5 PLUS LG WING PRS 1.000 .000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

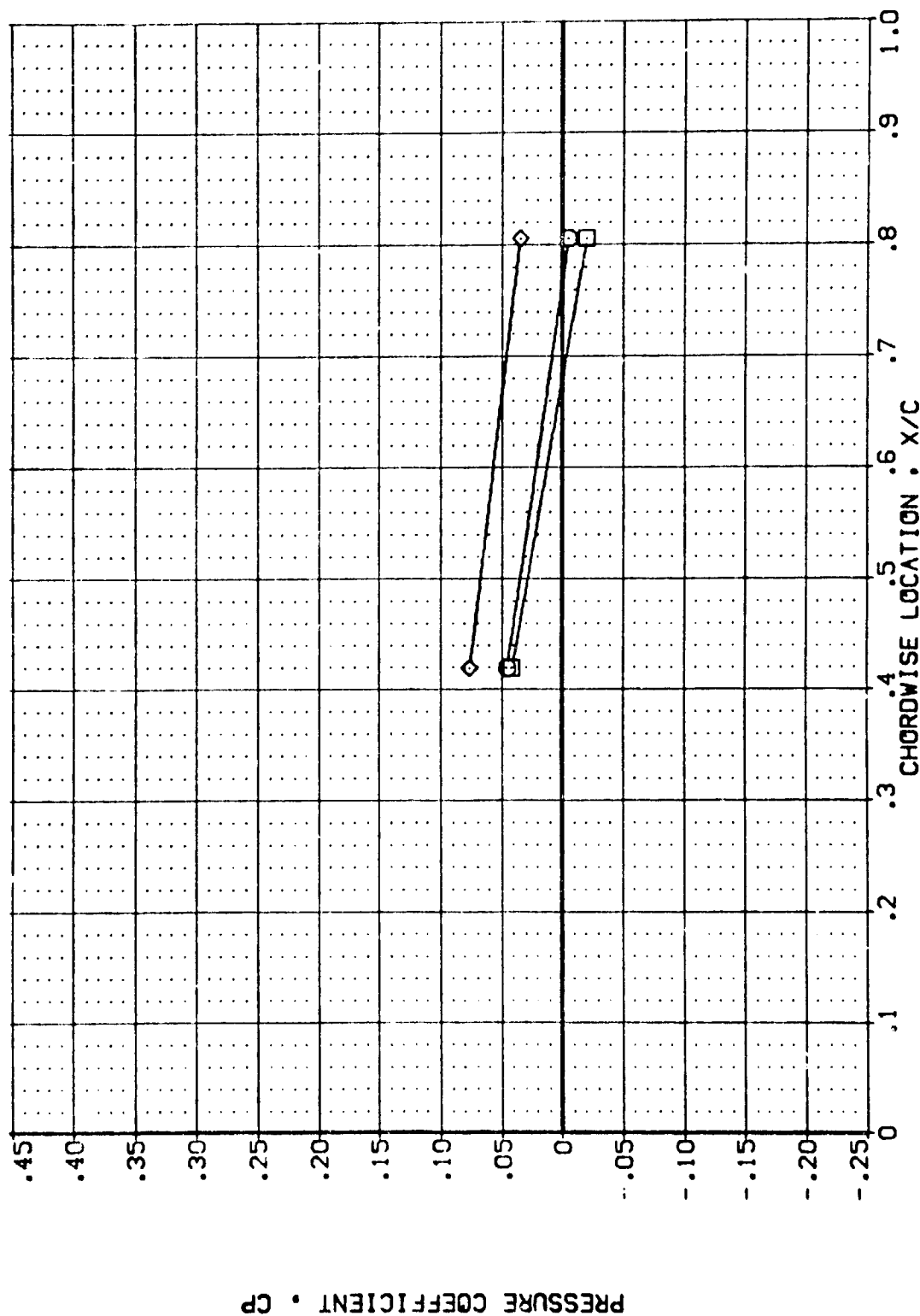
MACH = 3.000 ALPHA = 8.000 Y/B = .299 PAGE 733

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/P/R G/M/B/L

(LBZ038) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE .000 .000 1.000

(LBZ041) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 .768 1.000

(LBZ128) AYES 87-710 1A12C 01 T1 S1 H-3.5 PLUS LO WING P/B 1.000 .000 1.000

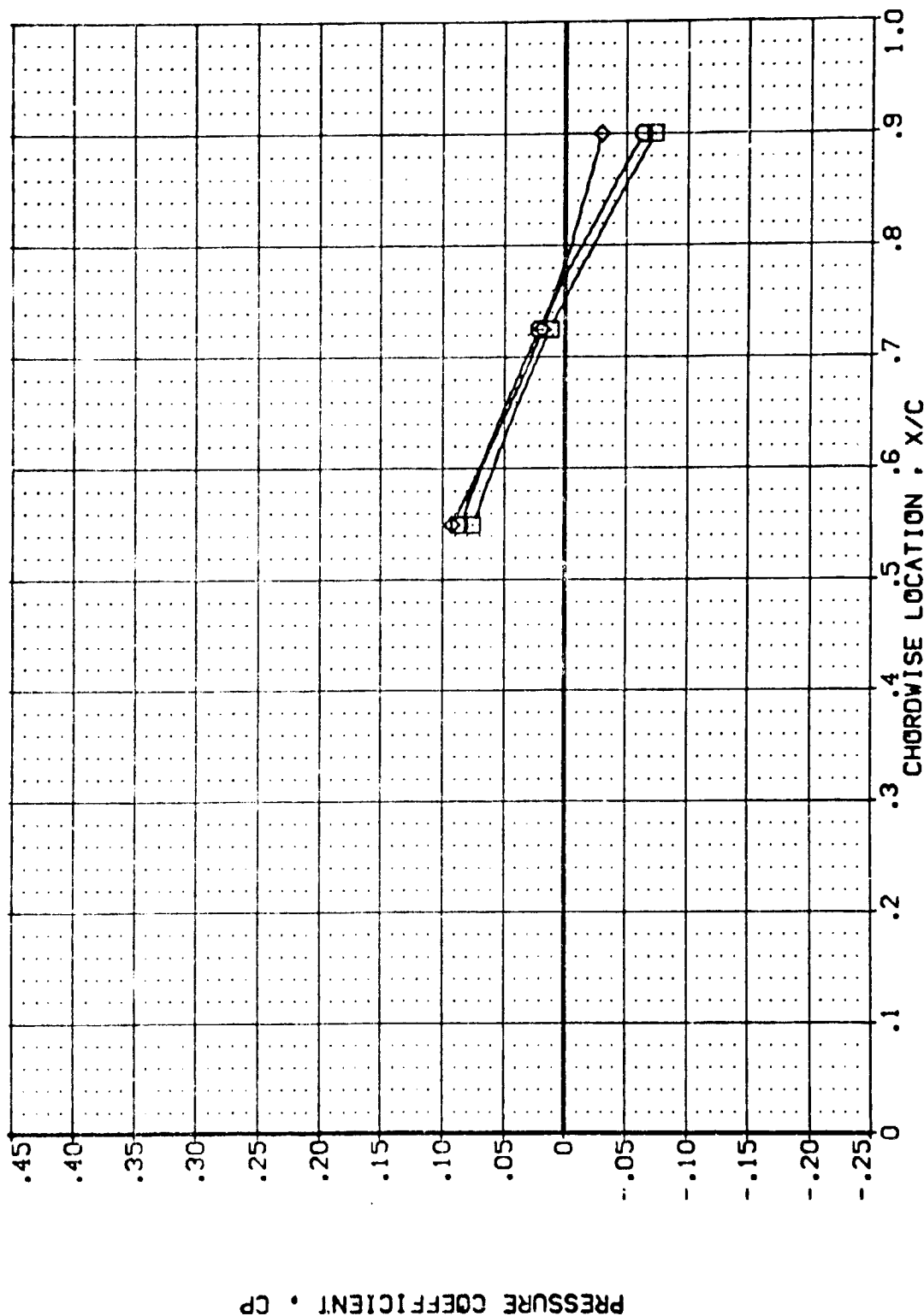


EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .427

PAGE 734

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	POWER	OPR	SRPR	GINBAL
(LBZ038)	AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	.000			1.000
(LBZ041)	AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE	1.000	26.860	.768	1.000
(LBZ128)	AVES 87-710 IAI2C 01 T1 S1 H-3.5 PLUS LO WING PRS	.000			1.000



PRESSURE COEFFICIENT • CP

EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .534

PAGE 735

DATA SET SYMBOL

(LBZ008)
(LBZ041)
(LBZ128)

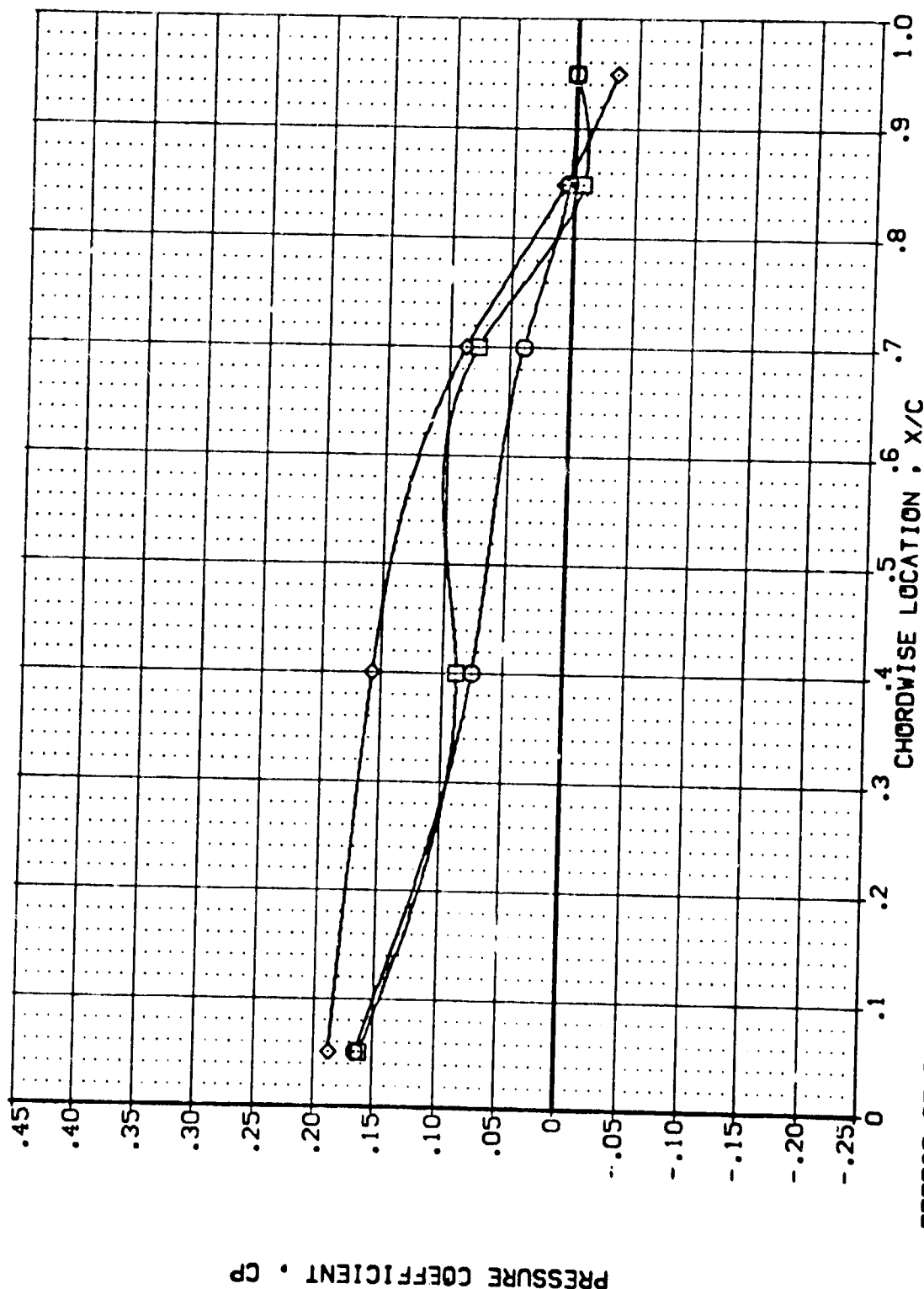
CONFIGURATION DESCRIPTION

AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 H-3.5 PLUS LG WING PPS

POWER 0.000
1.000
1.000
1.000

SEMPR .768

GIMBAL 1.000
1.000
1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

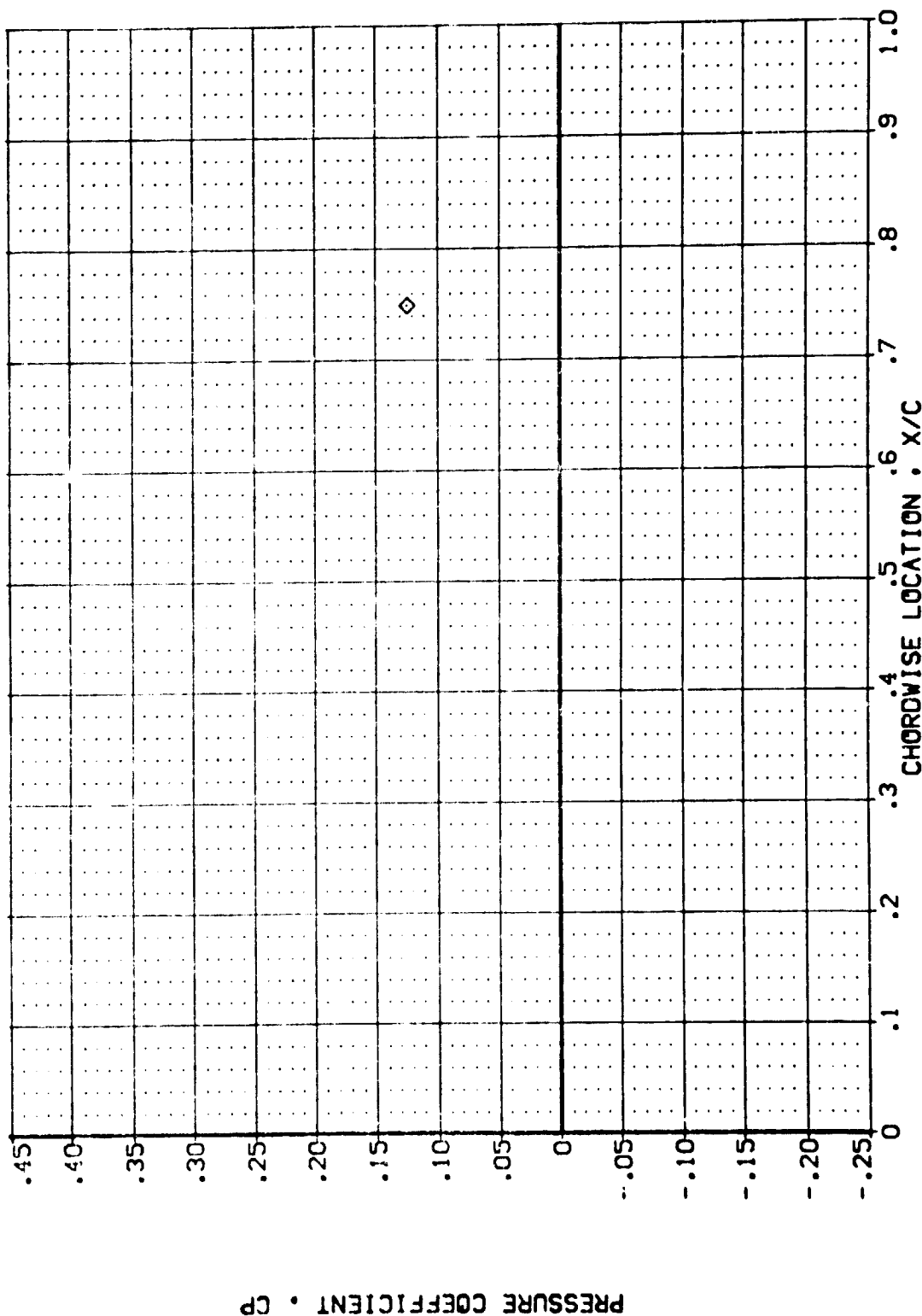
MACH = 3.000 ALPHA = 8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(LH2009)
(LH2041)
(LH2128)


AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AMES 87-710 IAI2C 01 T1 S1 H-3.5 PLUS LG WING PRES

POWER 1.000
OPR 26.860
SOPR .768
GIMBAL 1.000
1.000
1.000

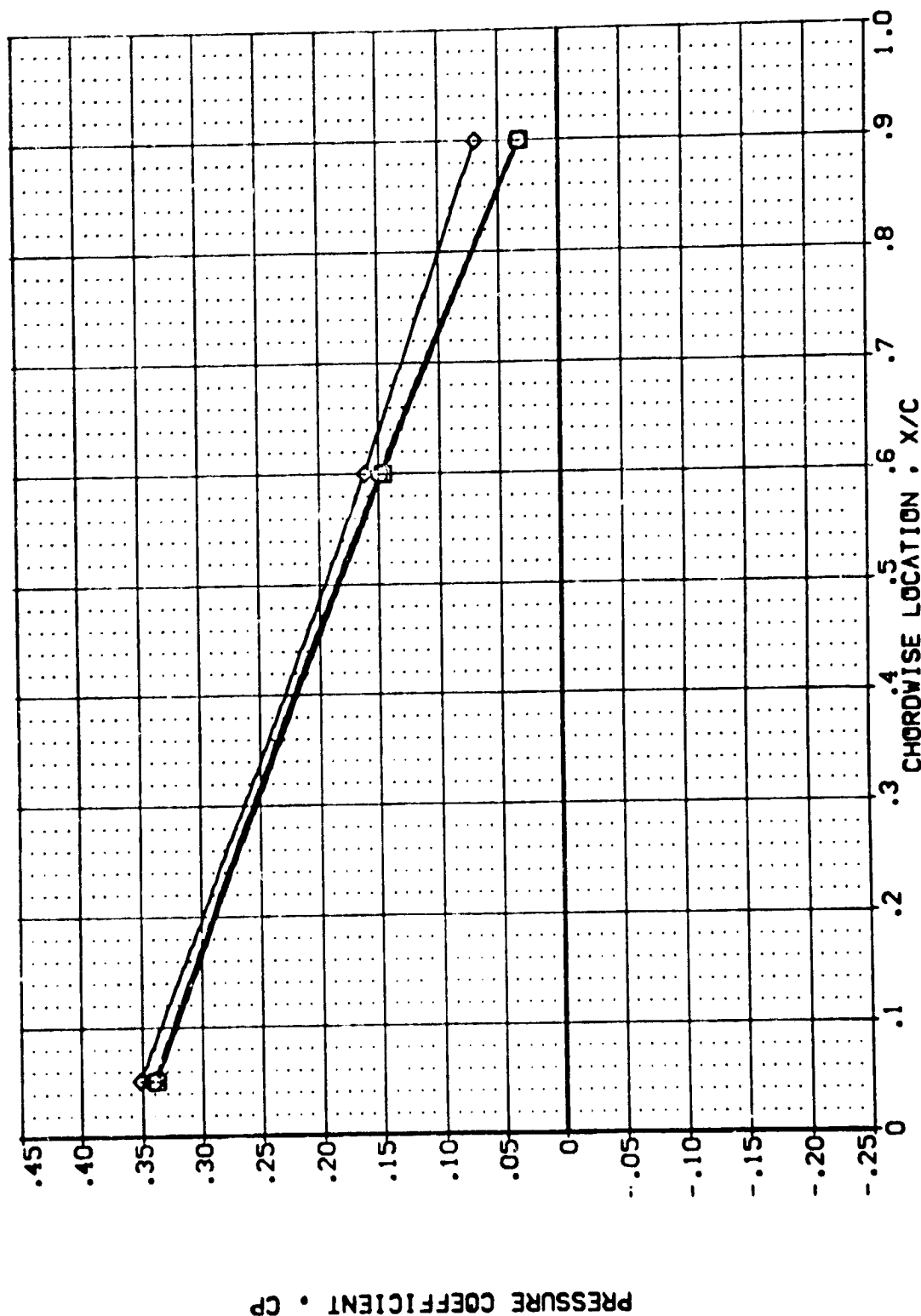


EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.000 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL:  CONFIGURATION DESCRIPTION: AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
 (LB2008) (LB2041) (LB2128) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
 AMES 87-710 IAI2C 01 T1 S1 M-3.5 PLUS LO WING PRES

POWER: .000
 DPR: 26.860
 SRRPR: .768
 GIMBAL: 1.000
 1.000
 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

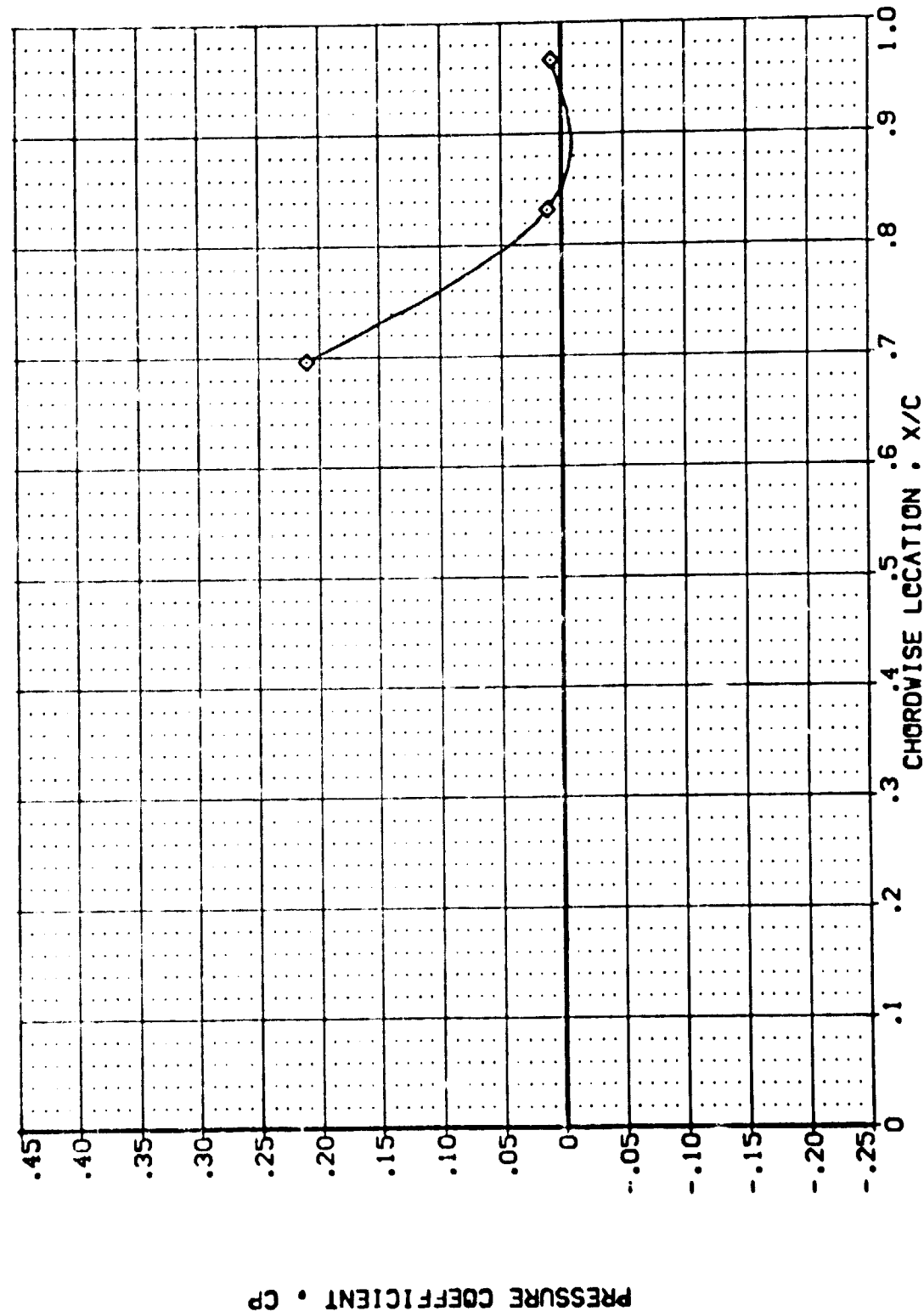
MACH = 3.000 ALPHA = 8.000 Y/B = .887

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CPR STPR GUNBAL

(LB2046) ASES 87-710 IAL2C 01 TI SI LOWER WING PRESSURE .000 23.860 .826 1.000

(LB2050) ASES 87-710 IAL2C 01 TI SI LOWER WING PRESSURE 1.000 1.000

(LB2131) ASES 87-710 IAL2C 01 TI SI N-3.5 PLUS LO WING PRS 1.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

DATA SET SYMBOL

CONFIGURATION DESCRIPTION

POWER

SEWER

SEWER

SEWER

SEWER

SEWER

SEWER

SEWER

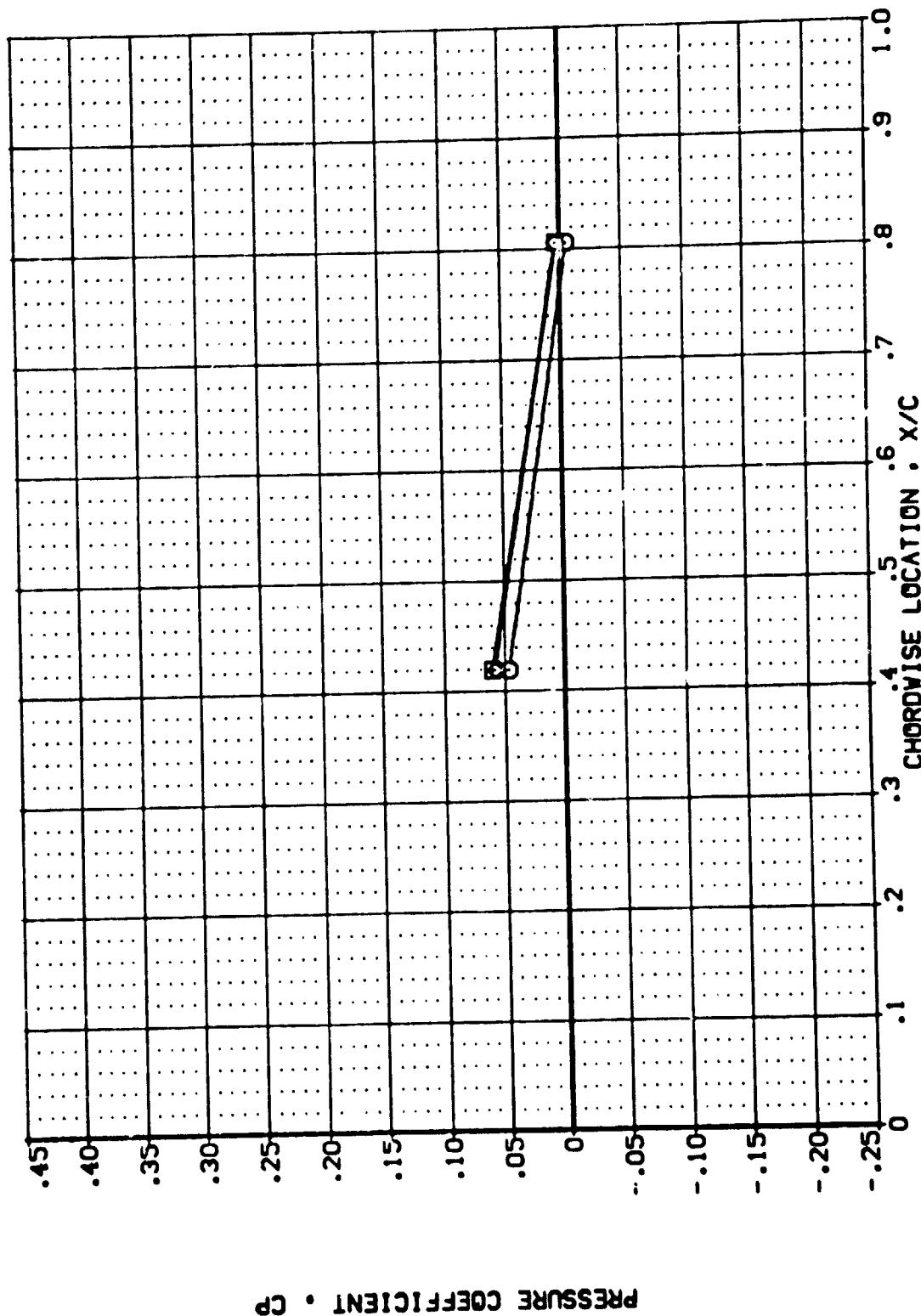
SEWER

SEWER

SEWER

SEWER

SEWER



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

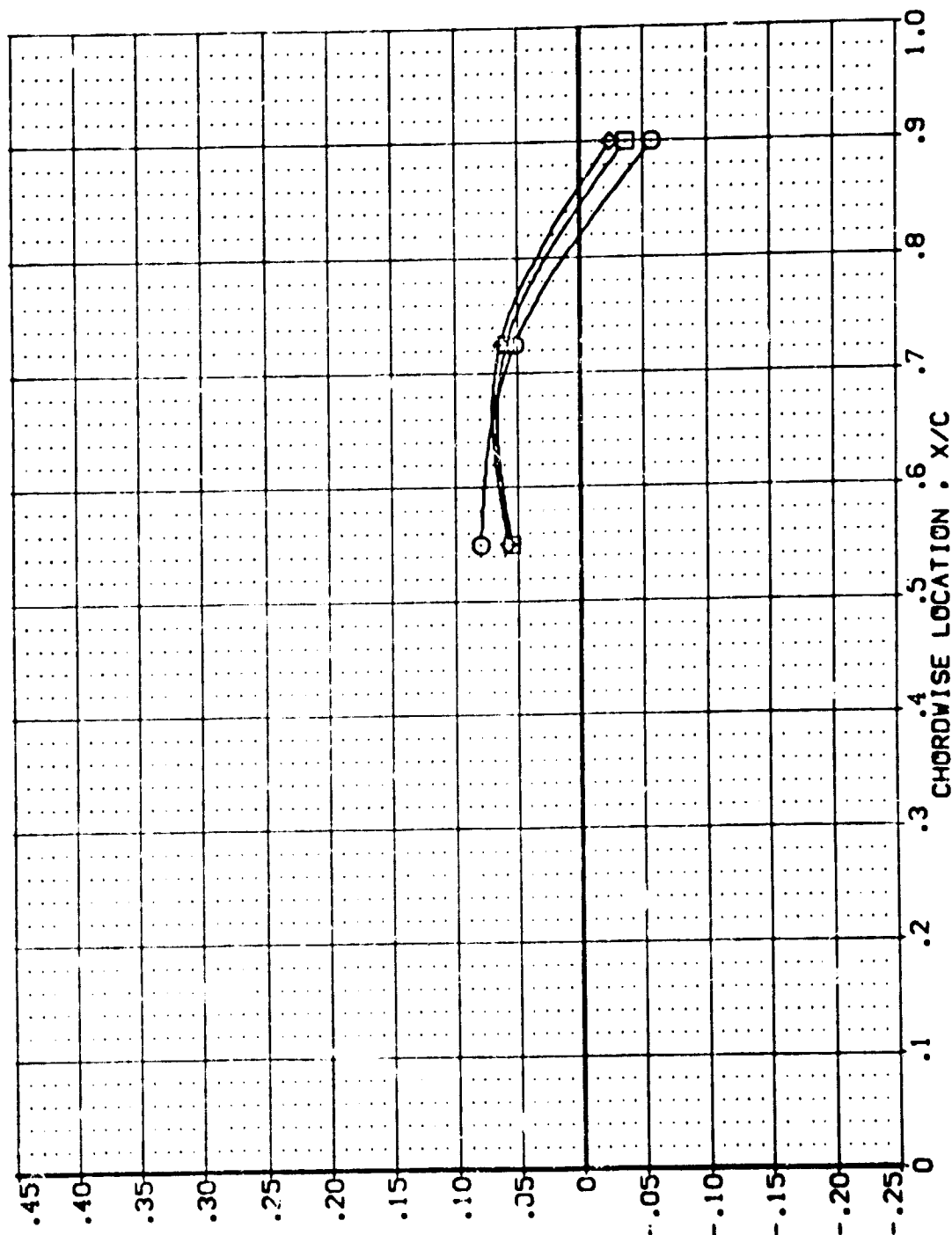
PAGE 740

MACH = 3.500

ALPHA = -8.000

Y/B = .427

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER DPR SDRR GIMBAL
 (LBZ045) AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000
 (LBZ050) AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000
 (LBZ131) AVES 87-710 1A12C 01 T1 S1 M-3.5 PLUS LG WING PMS 1.000



PRESSURE COEFFICIENT • CP

EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .534

PAGE 741

DATA SET SYMBOL

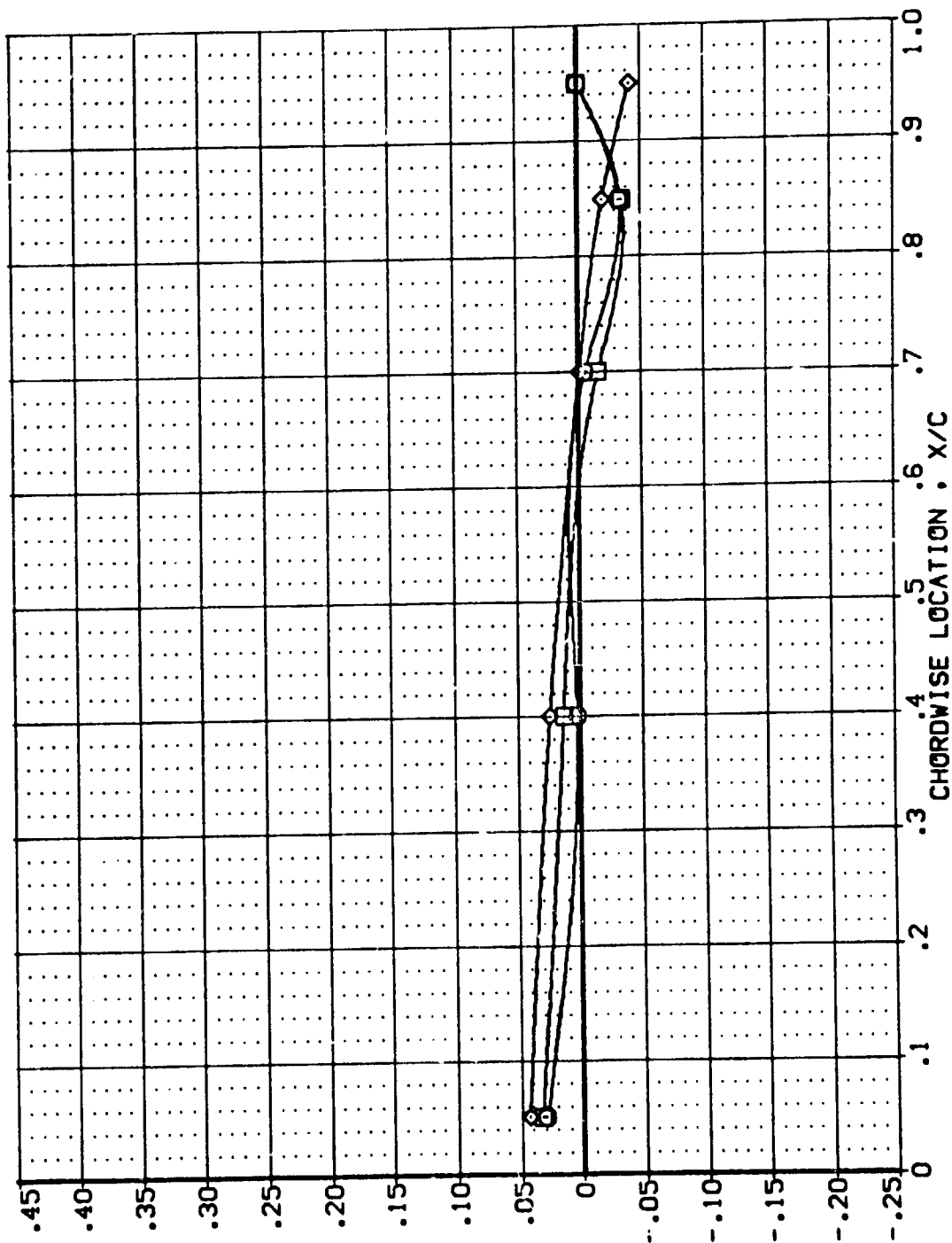
(LBZ046)
(LBZ050)
(LBZ131)

CONFIGURATION DESCRIPTION

AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 1A12C 01 T1 S1 M-3.5 PLUS LG WING FRS

POWER 1.000
CPR 23.860
SR-PR 1.000
GIMBAL 1.000

PRESSURE COEFFICIENT, CP



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

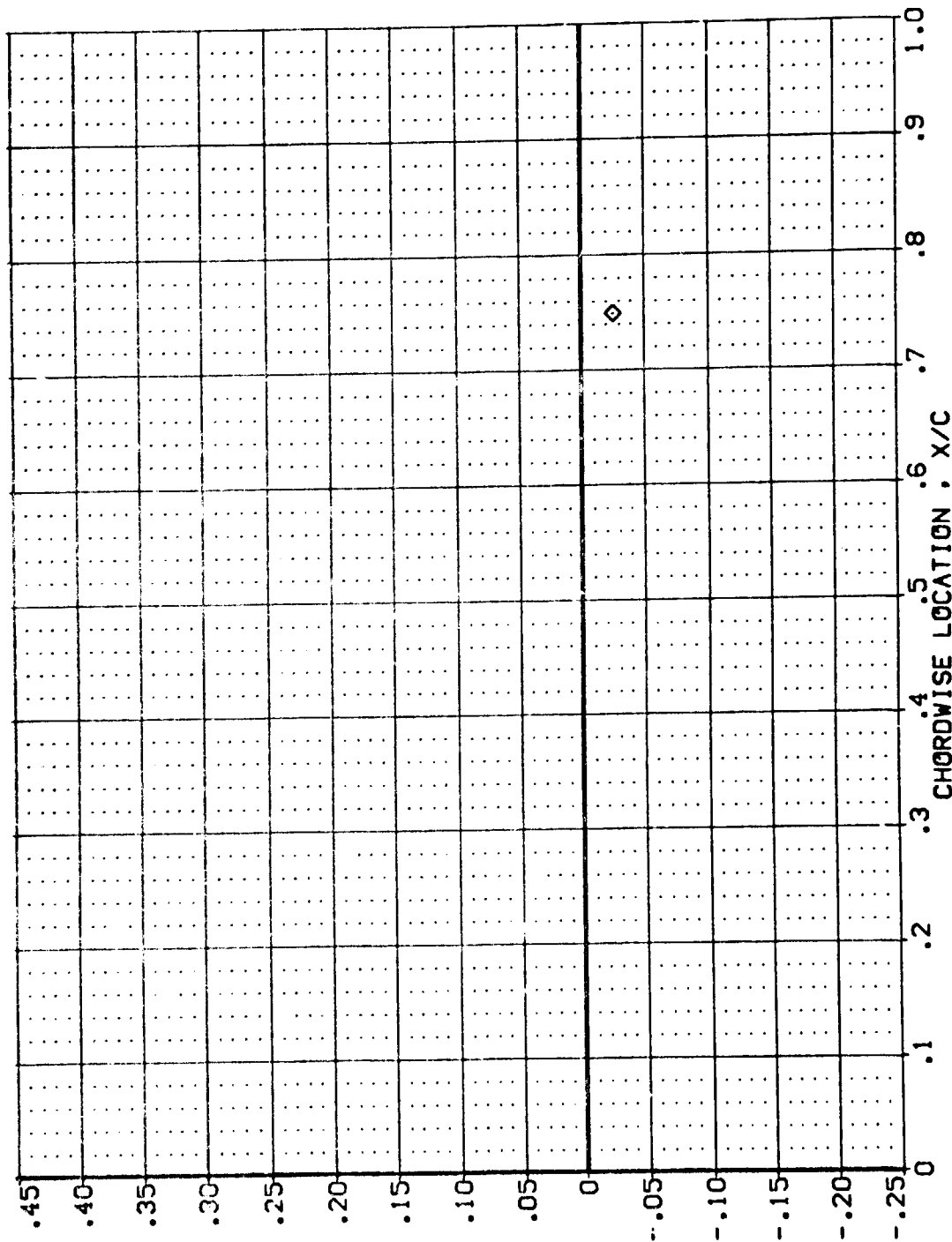
MACH = 3.500 ALPHA = -8.000 Y/B = .673

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SFRFR GINBAL

{LB2046} AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 23.660 .826 1.000

{LB2050} AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 1.000

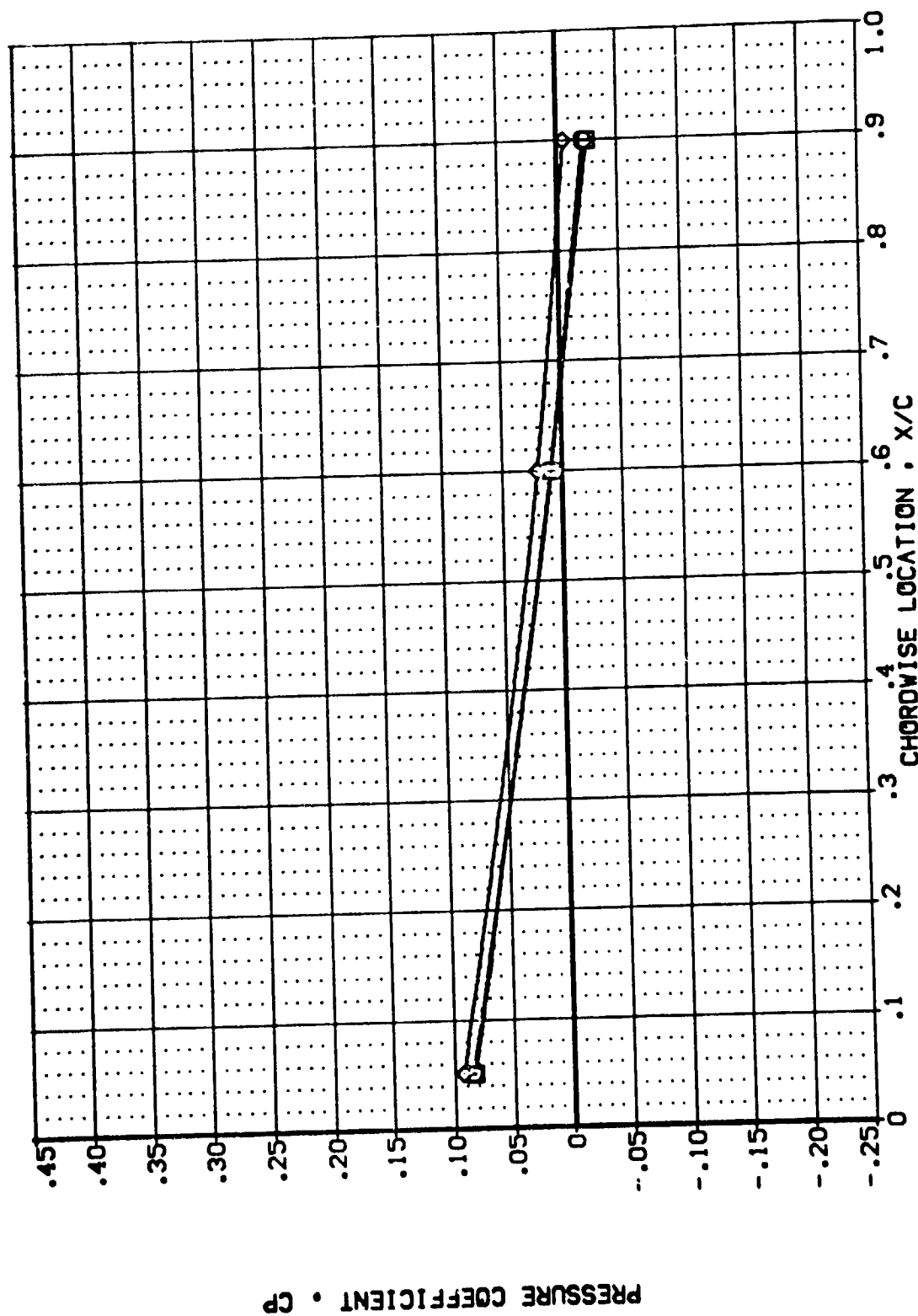
{LB2131} AVES 87-710 IAI2C 01 T1 S1 M-3.5 PLUS LG WING PRS .000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = -8.000 Y/B = .780 PAGE 743

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER QPR STAPP GIMBAL
 (LB2046) AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000
 (LB2050) AVES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000
 (LB2131) AVES 87-710 1A12C 01 T1 S1 H-3.5 PLUS LG WING PRS 1.000



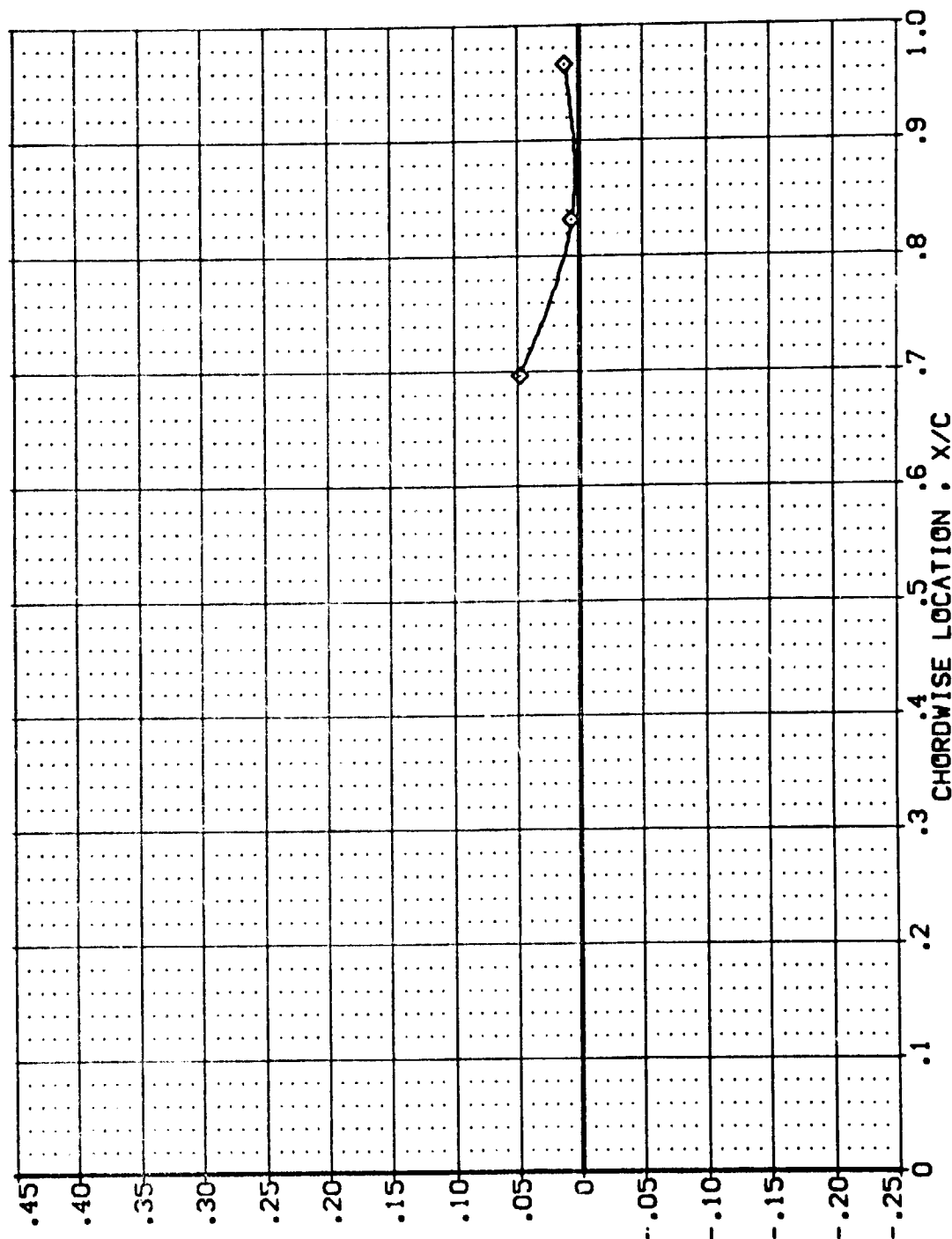
EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM
 MACH = 3.500 ALPHA = -8.000 Y/B = .887
 PAGE 744

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SWPR GIMBAL

(LBZ046) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 23.860 .826 1.000

(LBZ050) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 1.000

(LBZ131) ASES 87-710 IAI2C 01 T1 S1 H-3.5 PLUS LO WING PRS 1.000 1.000

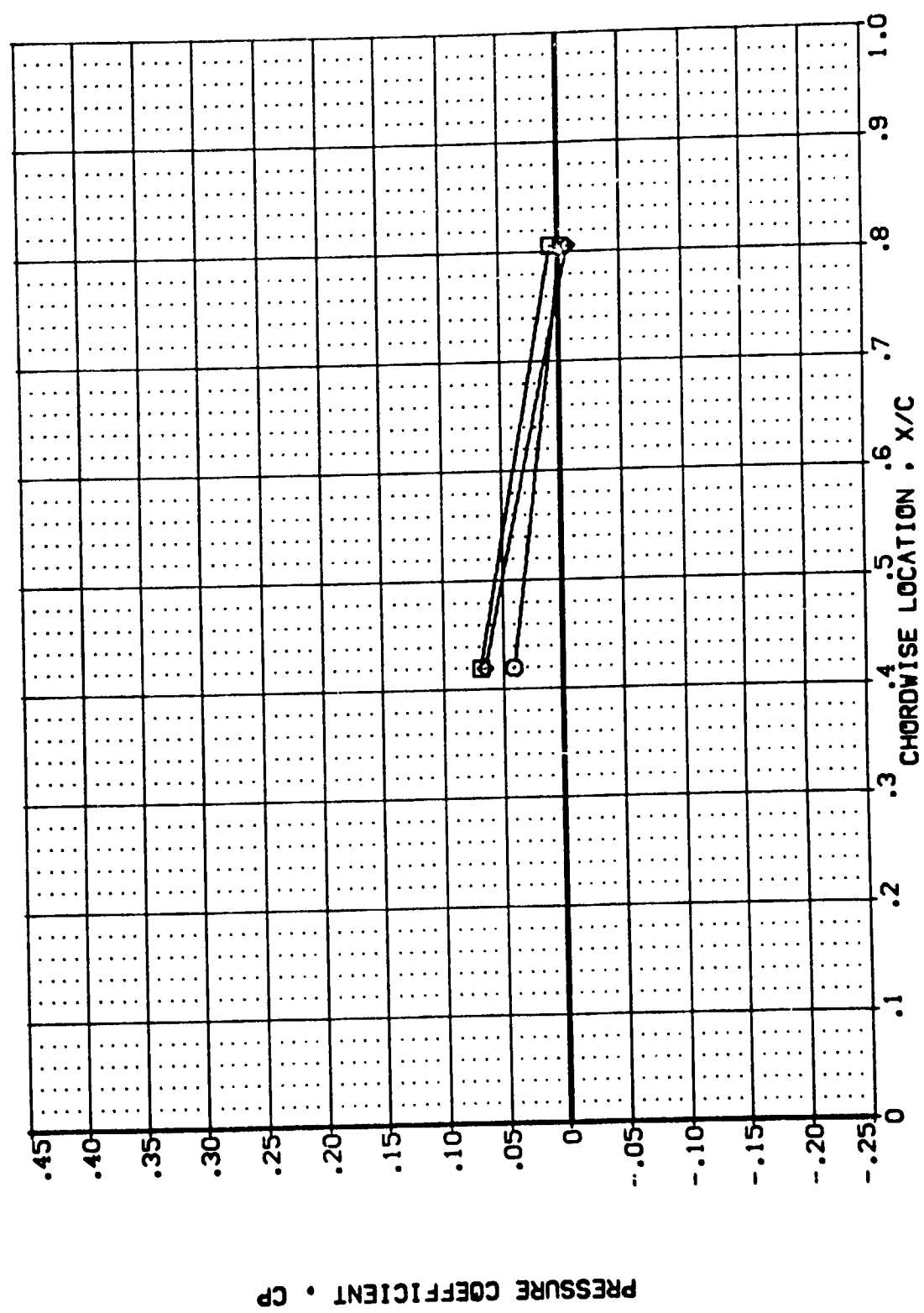


EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .299

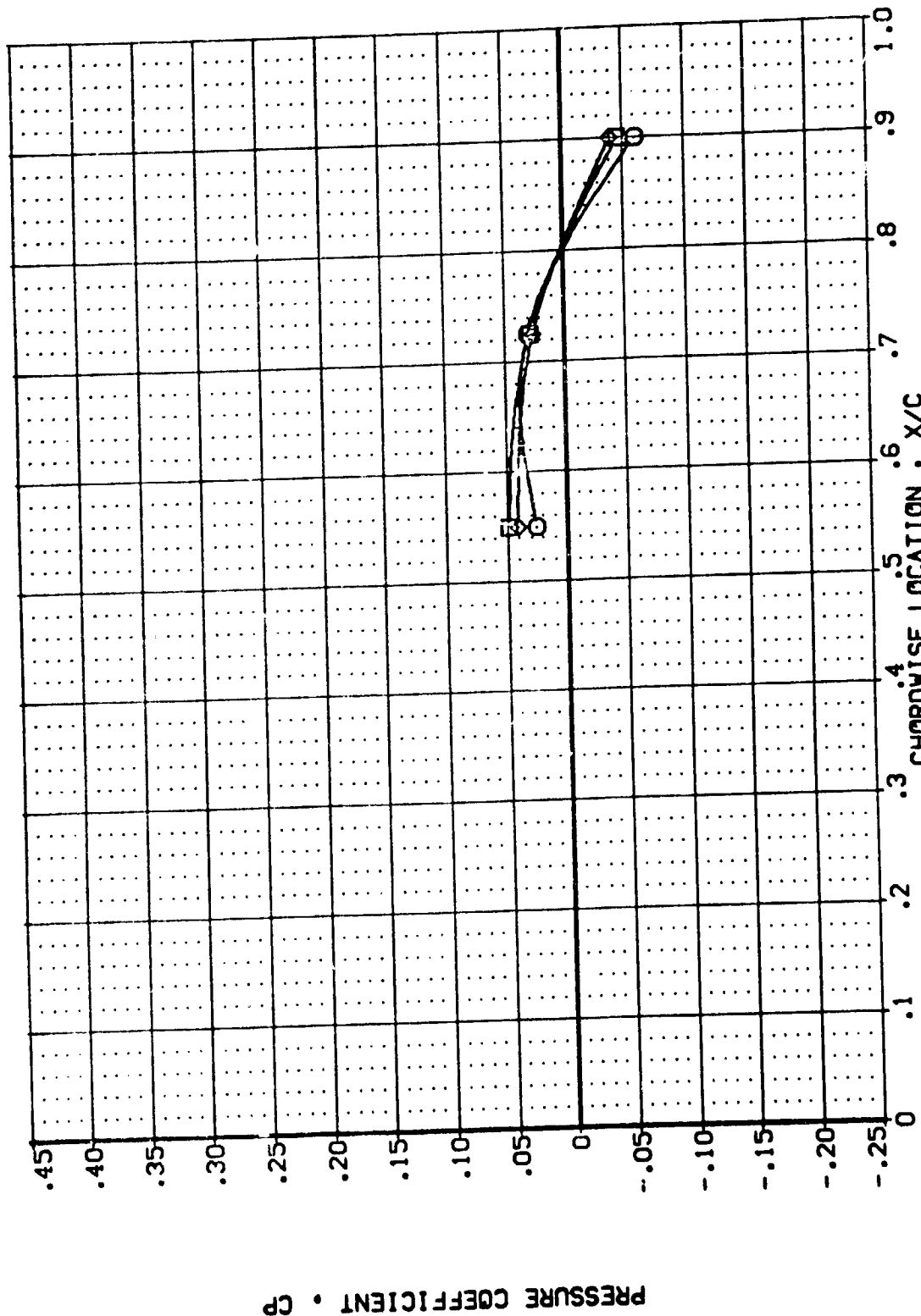
PAGE 745

DATA SET SYNO. CALCULATION DESCRIPTION: POWER C/P2 C/P3 GIMBAL
 (LB2048) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 23.960 .826 1.000
 (LB2050) ASES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 23.960 .826 1.000
 (LB2131) ASES 87-710 IAI2C 01 T1 S1 H-3.5 PLUS LG WING PRS 1.000 23.960 .826 1.000



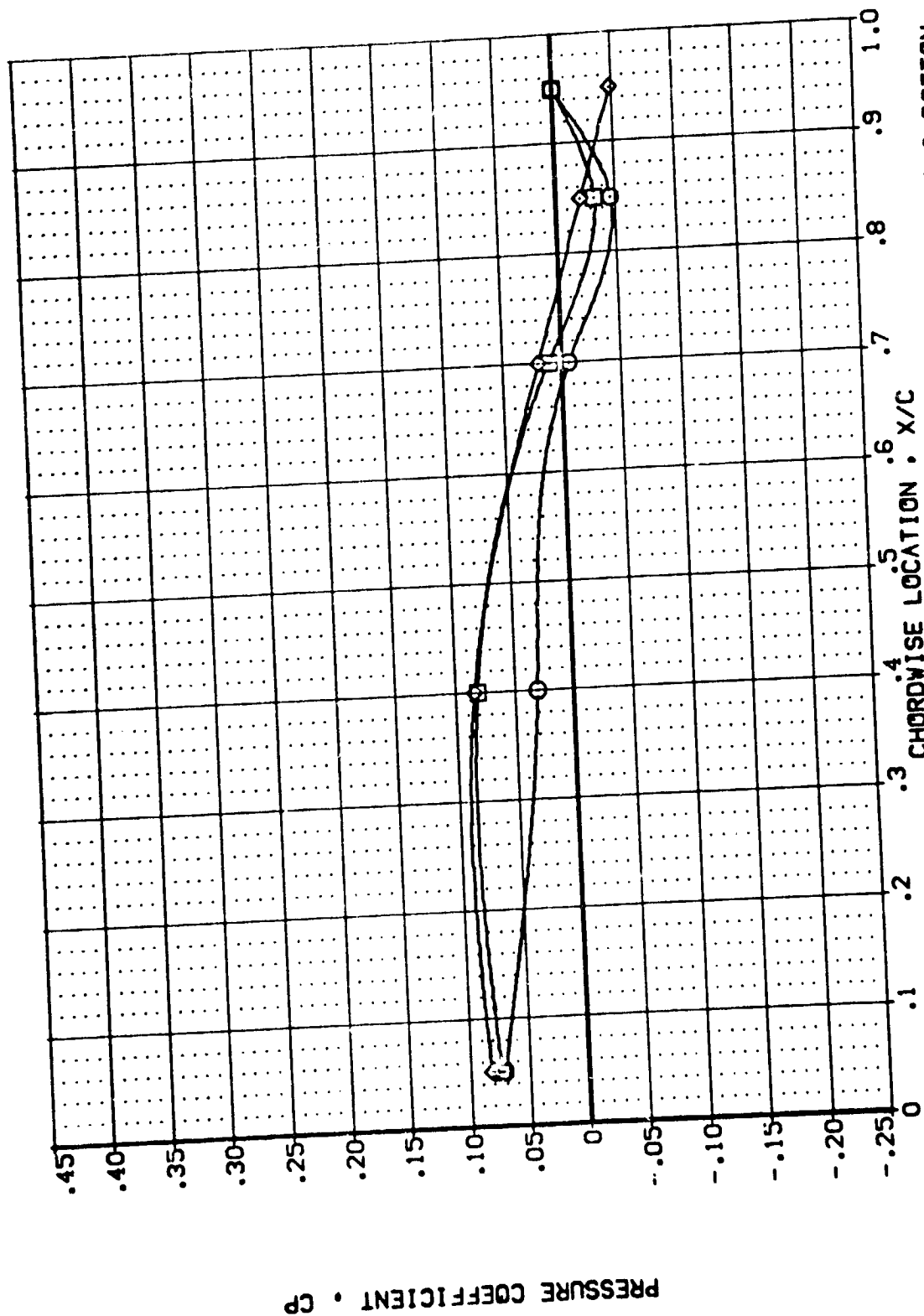
EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM
 MACH = 3.500 ALPHA = .000 Y/B = .427
 PAGE 746

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER GPR SFRP GIMBAL
 (LB2046) AHS 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 23.50 .826 1.000
 (LB2050) AHS 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 23.50 .826 1.000
 (LB2131) AHS 87-710 IAI2C 01 T1 S1 M-3.5 PLUS LG WING PRS .000 23.50 .826 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM
 MACH = 3.500 ALPHA = .000 Y/B = .534
 PAGE 747

6888



0 .1 .2 .3 .4 .5 .6 .7 .8 .9
CHORDWISE LOCATION, X/C

EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

PAGE 748

EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE COEFFICIENTS

MACH = 3.500	ALPHA = .000	Y/B = .673
--------------	--------------	------------

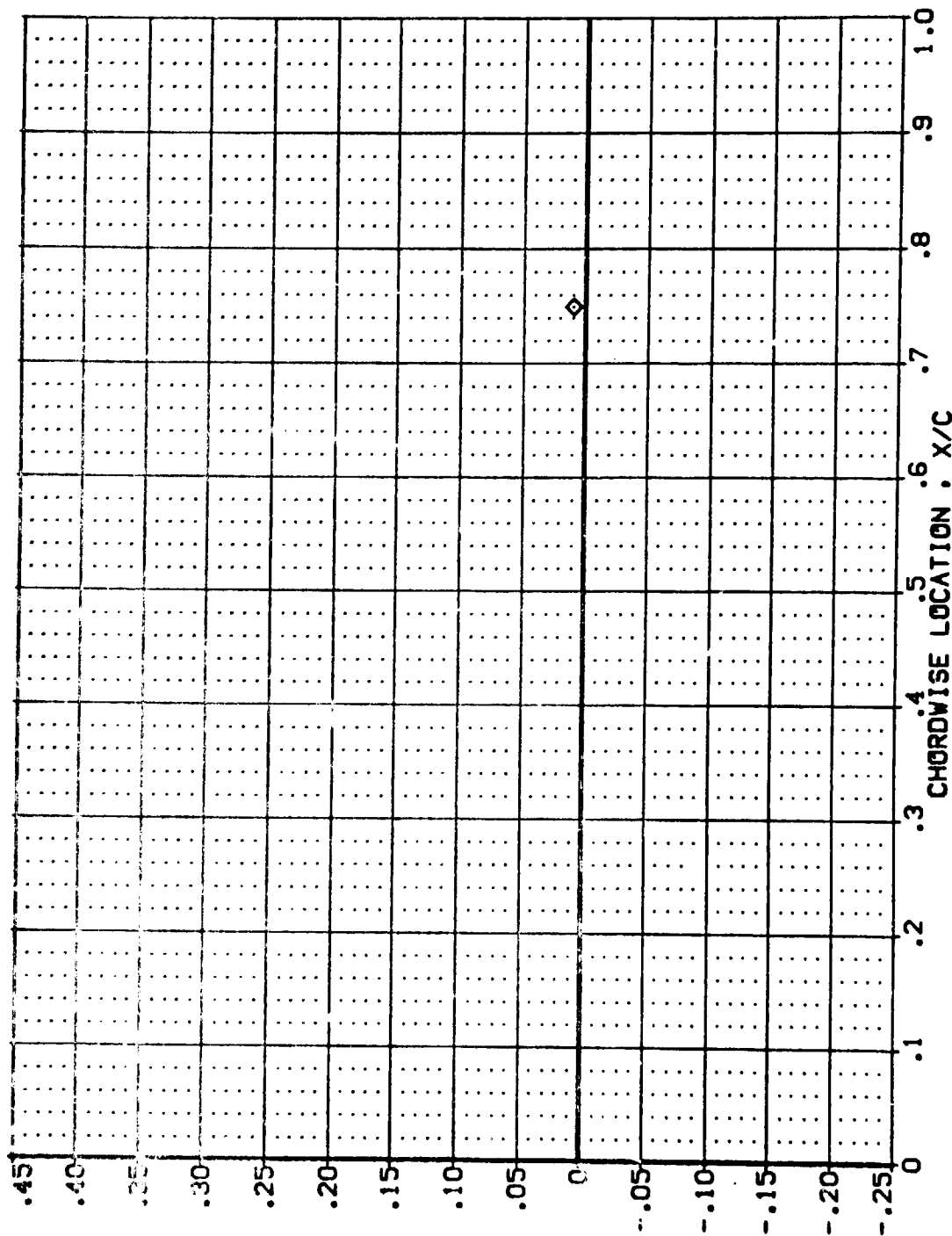
DATA SET 81238 CONFIGURATION DESCRIPTION

[LBZ04S]
[LBZ050]
[LRZ131]

AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE
AVES 87-710 IAI2C 01 T1 S1 H-3.5 PLUS LG WING PMS

POWER 0.000
1.000
23.860
0.028
0.000
0.000
0.000

SIGNAL

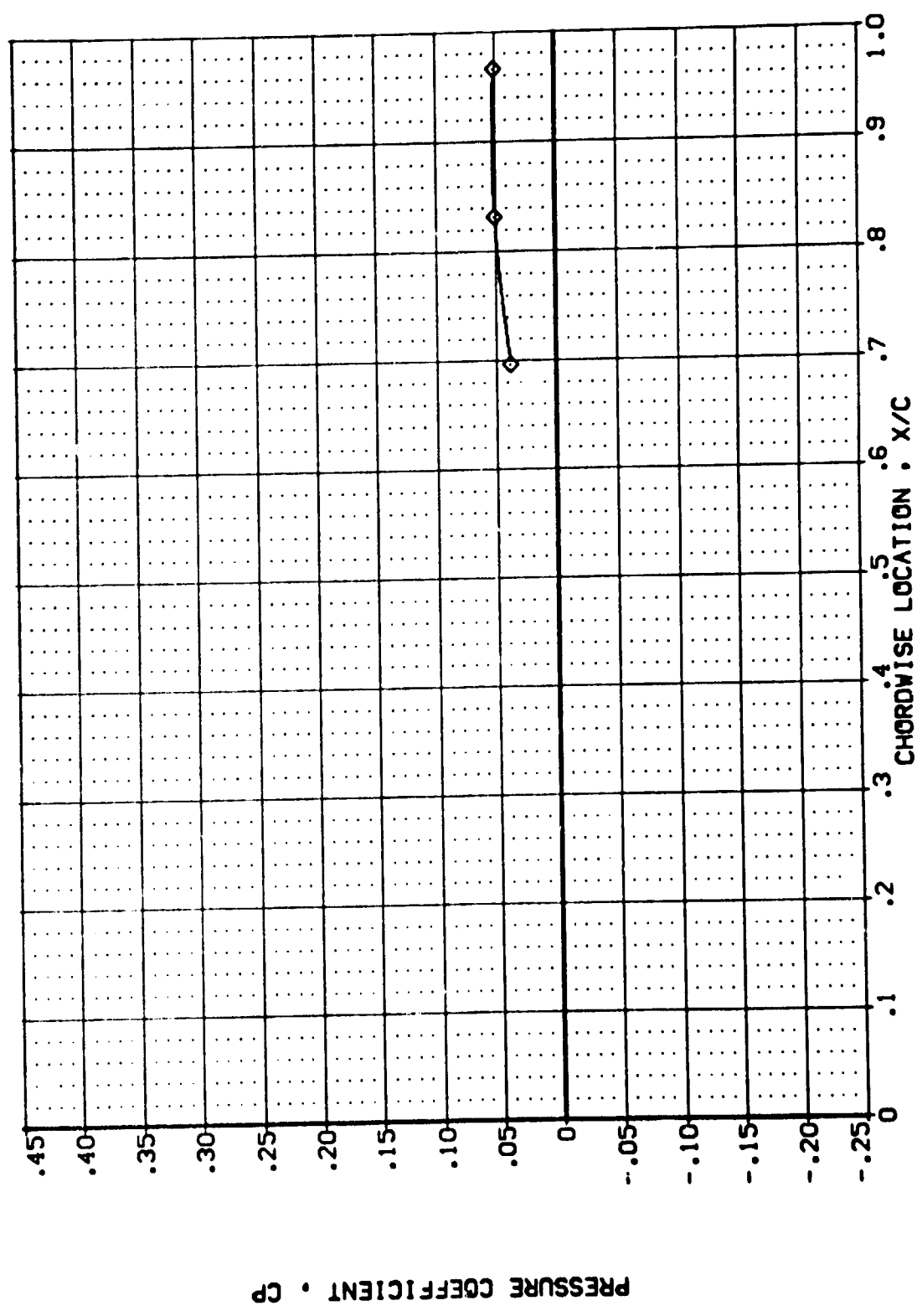


PRESSURE COEFFICIENT - CP

EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = .000 Y/B = .780

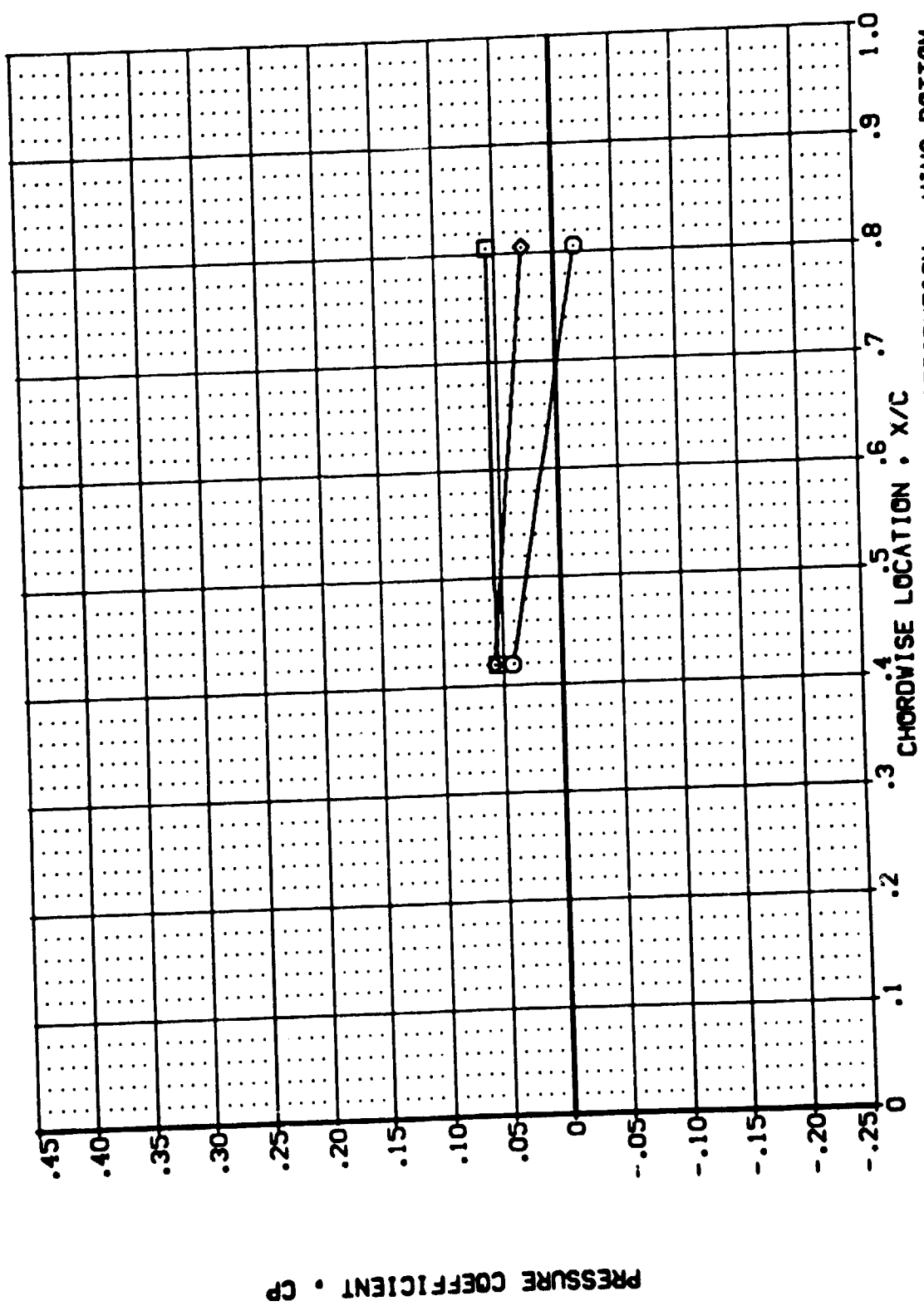
DATA SET SYMBOL: **LBZD48** CONFIGURATION DESCRIPTION: **AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE** POWER: **23.880** GIMBAL: **1.000**
LBZD50 **AVES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE** **1.000** **.826** **1.000**
LBZ131 **AVES 87-710 IAI2C 01 T1 S1 H-3.5 PLUS LO WING PRS** **1.000**



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .299 PAGE 751

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER QFR SFRPR SIMDAL
 (LBZ046) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE .000 1.000
 (LBZ050) AYES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 .626
 (LBZ131) AYES 87-710 1A12C 01 T1 S1 H-3.5 PLUS LD WING PRS .000 23.060 1.000



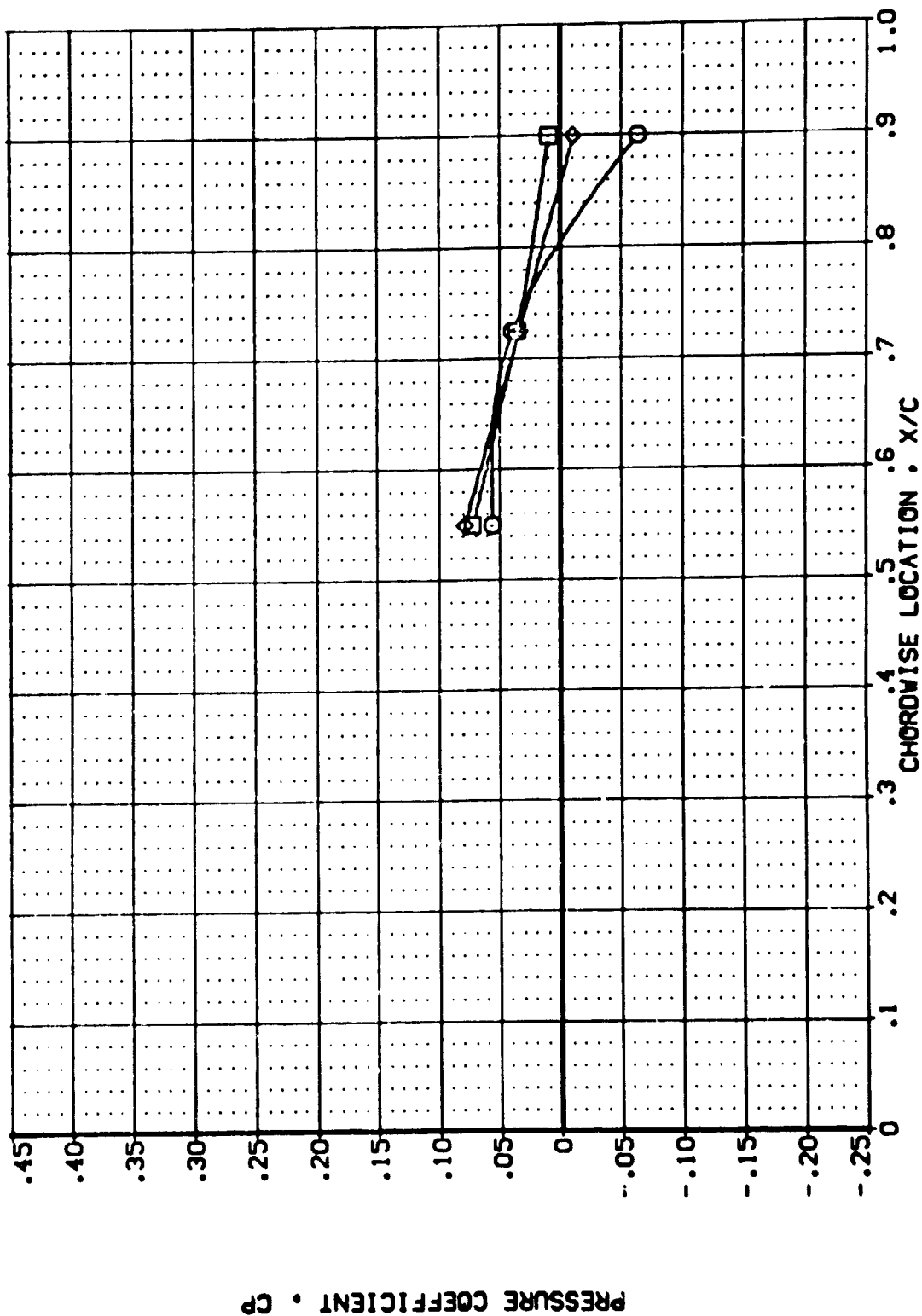
EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM
 MACH = 3.500 ALPHA = 8.000 Y/B = .427
 PAGE 752

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER CTR SPWR GIMBAL

(LB2048) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE .000 23.860 1.000

(LB2050) AMES 87-710 IAI2C 01 T1 S1 LOWER WING PRESSURE 1.000 .825 1.000

(LB2131) AMES 87-710 IAI2C 01 T1 S1 M-3.5 PLUS LO WING PRS 1.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

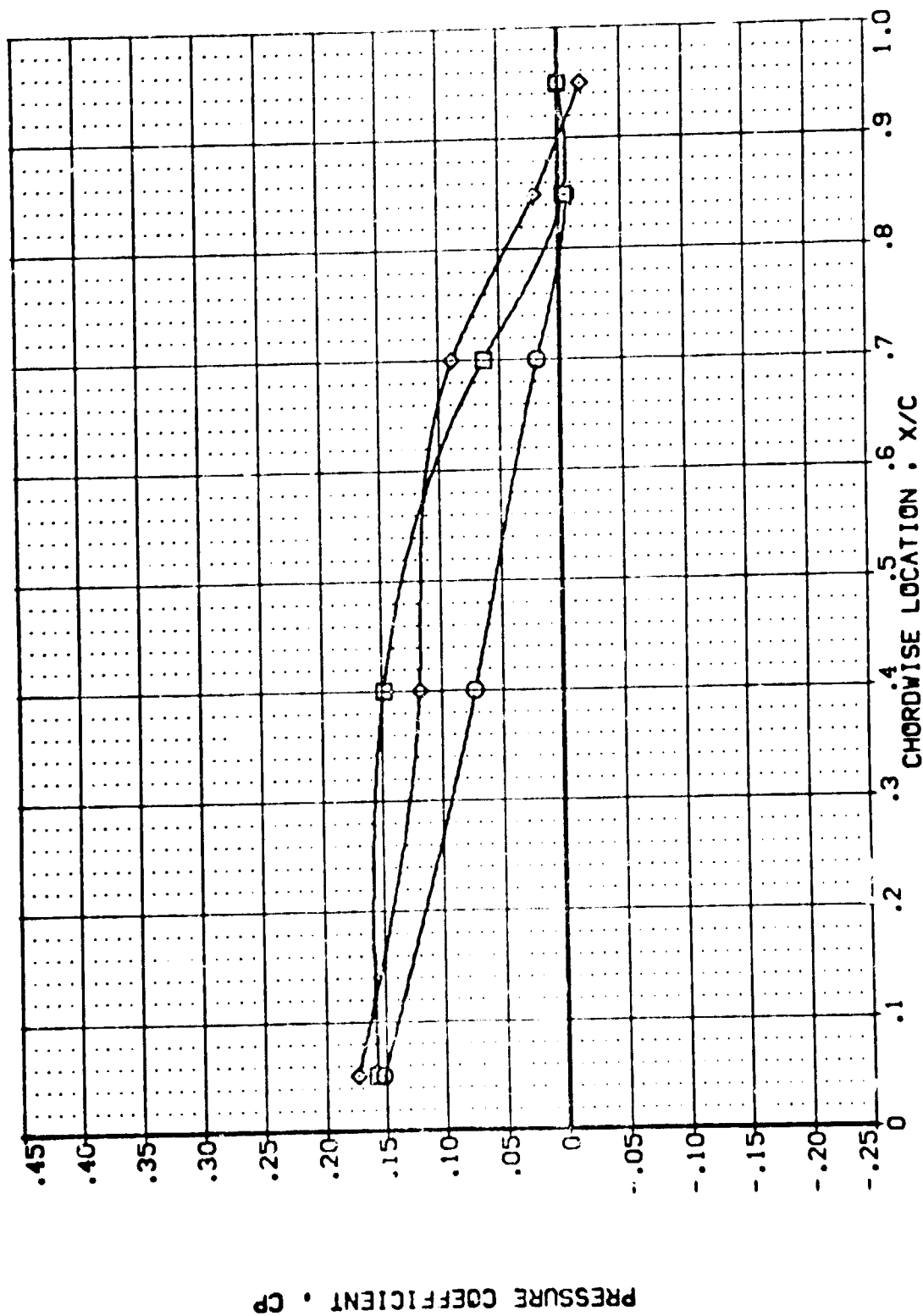
MACH = 3.500 ALPHA = 8.000 Y/B = .534 PAGE 753

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER C/P S/P/R G/M/B/L

(LBZ045) ASES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE .000 23.8650 .828 1.000


(LBZ050) ASES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 1.000

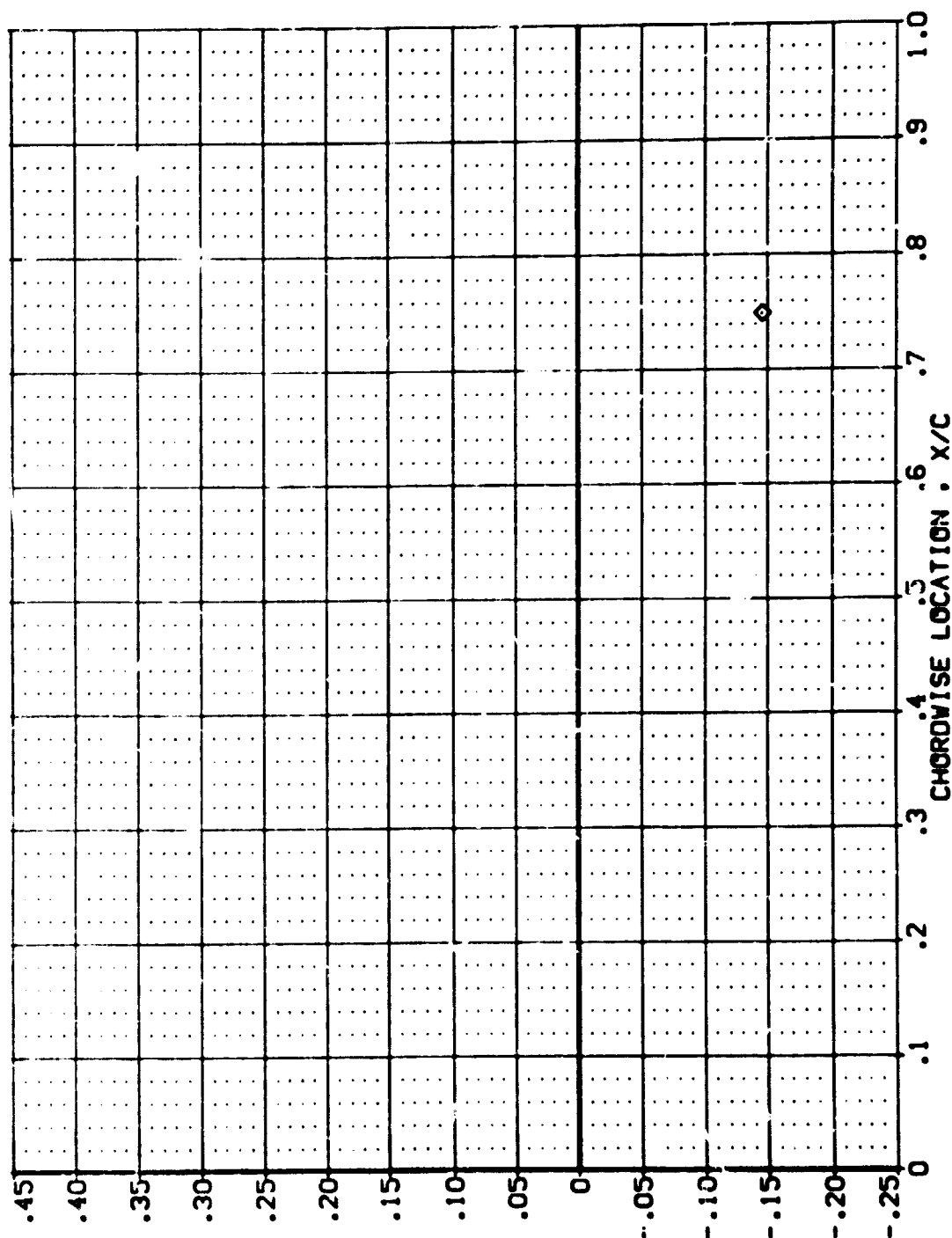
(LBZ131) ASES 87-710 1A12C 01 T1 S1 M-3.5 PLUS LO AND HRS 1.000 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .673 PAGE 754

DATA SET SYMBOL:  CONFIGURATION DESCRIPTION: AVE'S 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 1.000 1.000
 (LB0048) (LB0050) (LB0050) AVE'S 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000 1.000 1.000
 (LB0050) (LB0050) (LB0050) AVE'S 87-710 1A12C 01 T1 S1 H-3.5 PLUS LG WING PRS .000 .000 .000

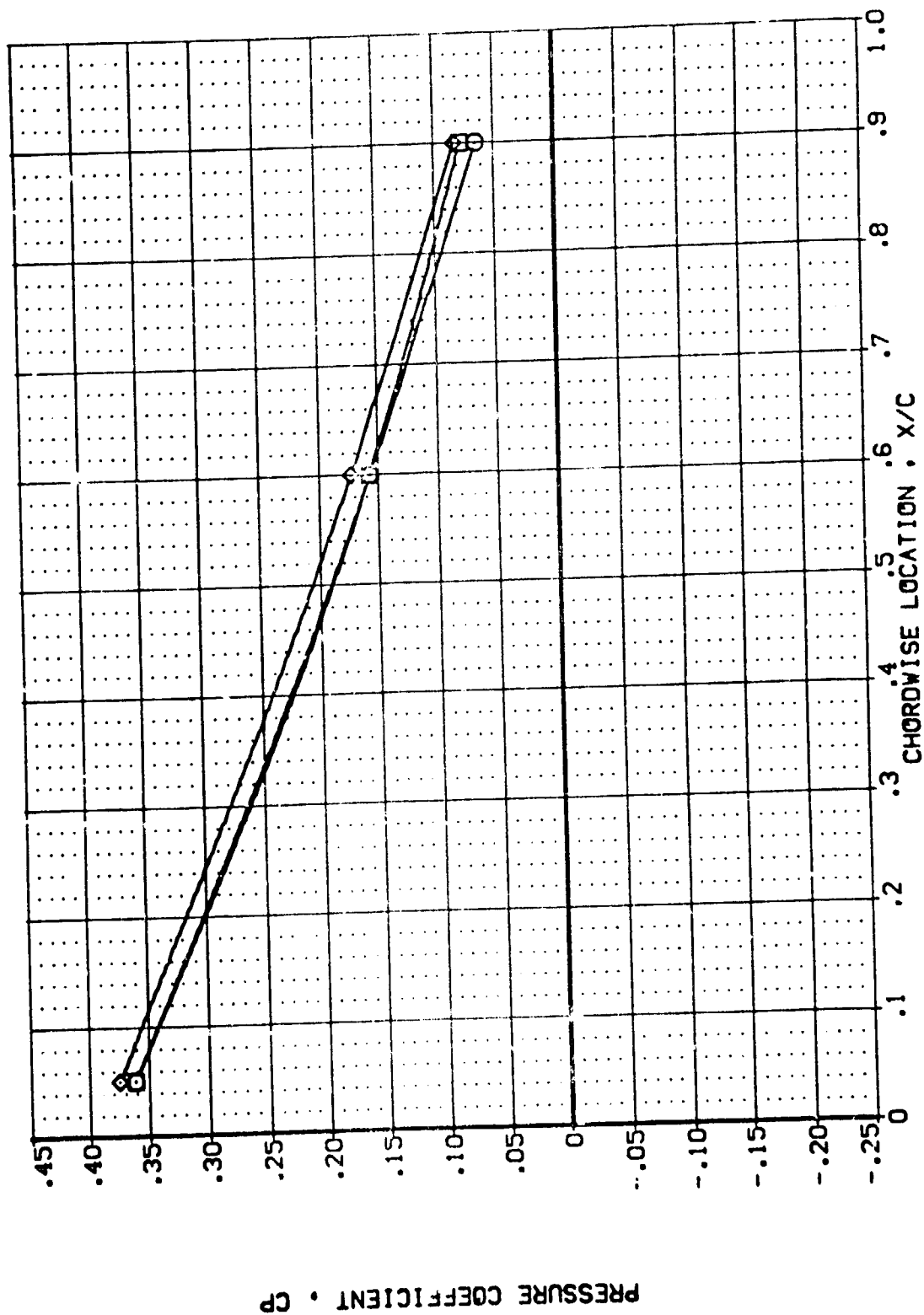


PRESSURE COEFFICIENT . CP

EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM

MACH = 3.500 ALPHA = 8.000 Y/B = .780

DATA SET SYMBOL CONFIGURATION DESCRIPTION POWER QPR SR-PR GIMBAL
 (LBZ046) APES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE .000
 (LBZ050) APES 87-710 1A12C 01 T1 S1 LOWER WING PRESSURE 1.000
 (LBZ131) APES 87-710 1A12C 01 T1 S1 H-3.5 PLUS LO WING PRS 1.000



EFFECT OF PLUME SIMULATION METHOD ON WING PRESSURE DISTRIBUTION - WING BOTTOM
 MACH = 3.500 ALPHA = 8.000 Y/B = .887 PAGE 756